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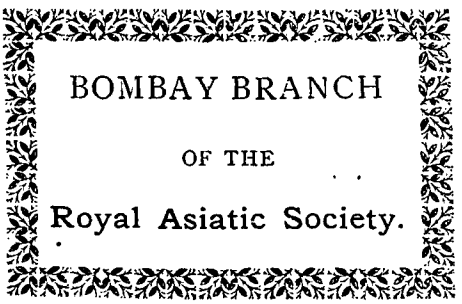

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NAVY (HEALTH).

RETURN to an Order of the Honourable The House of Commons, dated 26 March 1868:—.

A COPY

OF THE

STATISTICAL ABSTRACT

OF THE

HEALTH OF THE NAVY,

FOR THE YEAR 1867-68.

108803

1 JULY 1867 to 30 JUNE 1868.

(*Lord Henry Lennox.*)

Ordered, by The House of Commons, *to be Printed,*
26 *March* 1868.

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INTRODUCTORY OBSERVATIONS.

NOTE.—The terms "ratio of sickness," and "sick-rate," in the following Abstract, are to be understood as referring only to the ratio of cases placed on the sick-list, and not to the loss of service, or number of days' sickness, occasioned by them.

Introductory Observations.

DURING the twelve months embraced in the following Abstract, the health of the Navy may be considered to have been very satisfactory. Compared with the average taken for a period of twelve years, there was a reduction in the ratio of cases entered on the sick-list, in the Total Force, equal to 144·2 per 1,000, and of mortality to the extent of 3·7 per 1,000. There was a fractional increase (·1 per 1,000), in the ratio of invaliding. All these ratios, however, were slightly higher than those of the preceding twelve months, which, as was remarked in the Abstract for 1866-67, were the lowest that had occurred during a period of eleven years.

In the Mediterranean, a considerable amount of sickness and some mortality occurred in a few of the vessels of the squadron, consequent upon communication with Spezia, where fever and diarrhœa were prevailing epidemically on shore; and at the Piræus, where small-pox was epidemic, two vessels became infected by the disease. There appears to have been no cholera on the station, nor was diarrhœa very prevalent, excepting at Spezia.

In the West Indies, yellow fever still lingered about Jamaica, and although it was not extensively prevalent, it

Introductory Observations.

appeared in one or two vessels of the squadron, and caused some mortality. This same malignant form of fever prevailed in many of the seaports of the Pacific, such as Panama, Taboga, Lima, and Callao. Fortunately, only one vessel of the squadron was attacked by it, and in that instance the disease was conveyed on board by the surgeon of the ship, who had been in attendance on some of the sick poor of Taboga.

The squadron on the West Coast of Africa was, generally speaking, healthy. Much sickness occurred in one vessel, consequent upon prolonged exposure to malarious influences in the River Niger. The vessel had gone on shore opposite some hostile villages, and the crew were much exposed for a length of time before she could be got off. Nearly every officer and man became subsequently affected with fever in consequence.

A good deal of sickness and invaliding occurred in that portion of the squadron on the Cape of Good Hope and East Indies Station which was employed in the Red Sea in connection with the Abyssinian Expedition. The chief cause of invaliding was debility, the result of the enervating influence of the heat and climate of Annesley Bay.

During the period embraced in this Abstract the Total Force corrected for time was 50,340; but as there were several small vessels from which no returns of cases were obtained, it has been necessary, in estimating the ratio of cases entered on the sick-list, to make a reduction equal to the complements of these vessels, and for this purpose, accordingly, the Force is estimated at 50,160. The Total Force however, is taken in estimating the Invaliding and Death rates, the necessary returns under those heads having been obtained. The total number of cases entered on the sick-list was 64,997, which is in the ratio of 1295·7 per 1,000 of mean force, being an increase, compared with the preceding twelve months, equal to 30·9 per 1,000.

The

The following Table shows the ratios of cases entered on the sick-list on each station.

Stations.	Ratio per 1,000 of Cases of Disease and Injury.
Home	869·7
Mediterranean	1383·2
North America and West Indies	1547·
South-east Coast of America	1575·9
Pacific	1816·7
West Coast of Africa	1972·5
East Indies and Cape of Good Hope	2041·
China	1824·1
Australia	1539·9
Irregular Force	1365·5

It thus appears that the highest ratios of cases were on the East Indies and Cape of Good Hope Station, the West Coast of Africa, China, and the Pacific, the lowest being on the Home and the Mediterranean stations, and in the Irregular Force.

The high ratio of cases on the East Indies and Cape of Good Hope Station was, as has been already intimated, altogether dependent upon the nature of the duties devolving upon that portion of the squadron which was employed in the Red Sea in connection with the Abyssinian Expedition. These duties were often of a very laborious and harassing nature, and performed, as they were, in a climate the temperature of which was almost unbearable, it is less to be wondered at that many cases should have been entered on the sick-list than that so little mortality should have resulted from them. Febrile affections, dependent mostly on insolation, and general debility and cachexia, the result of the enervating nature of the climate, were the chief affections in this portion of the squadron.

The vessels on this station which were not employed with the Abyssinian Expedition were, as a rule, very healthy.

 Although

Introductory Observations.

Although the ratio of cases entered on the sick-list on the West Coast of Africa was high, it was lower than the corresponding ratio of the preceding twelve months to the extent of 155·3 per 1,000 of mean force. The squadron was, in fact, generally speaking, in a very fair condition of health, and although the admissions to the sick-list were numerous, the cases were for the most part of an unimportant character. Reference has already been made to the large amount of sickness which occurred in one vessel (the Investigator), consequent upon unusual exposure to malarious influences in the River Niger. In several vessels diarrhœa was rather prevalent, and was attributed mostly to climatic causes. In one vessel small-pox prevailed epidemically. Great benefit will doubtless be derived from the system now adopted with this squadron, of allowing the vessels composing it to serve only a portion of their commission on this station, transferring them to others before the constitutions of their men become much deteriorated. During the twelve months embraced in this Return, two vessels of the squadron were thus transferred to the South East Coast of America Station, one to North America and the West Indies, and one to the Mediterranean Station.

On the China Station there was an increase in the ratio of cases, compared with the preceding twelve months, to the extent of 169·5 per 1,000. The ratio in 1866-67, however, was the lowest that had occurred during a period of eleven years. The most prevalent diseases were fevers, diarrhœa, and dysentery. Cases of small-pox occurred in several of the vessels, but in none did the disease prevail epidemically. There were also a few cases of cholera in the squadron, four of which proved fatal.

Although the ratio of cases on the Pacific Station was relatively high, the increase, compared with the preceding twelve months, was only to the extent of 9·6 per 1,000. The ratio of 1866-67, however, was the highest that had occurred for many years, which gives a greater importance to the apparently trifling increase in 1867-68. Although, as previously remarked, yellow fever prevailed epidemically in many of the sea-ports of the station, with the exception of one vessel the squadron entirely escaped it.

The

The number of cases entered on the sick-list per man was, on the Home Station, ·8; Mediterranean, 1·3; North America and the West Indies, 1·5; South East Coast of America, 1·5; Pacific, 1·8; West Coast of Africa, 1·9; Cape of Good Hope and East Indies, 2·; China, 1·8; Australia, 1·5; and in the Irregular Force, 1·3, giving an average of 1·2 for the Total Force, which is precisely the same average that obtained in the preceding twelve months.

The following Table shows the average ratio of cases of disease and injury under treatment during twelve months, in various classes of vessels, and in the marine detachments serving abroad.

RATES.	Ratio per 1,000 of Force.	RATES.	Ratio per 1,000 of Force.
Iron-clad - - -	1340·8	Drill Ship - - -	748·3
First Rate - -	903·3	Coast Guard Ship -	883·7
Second Rate - -	2065·8	Training Ship - -	718·9
Fourth Rate - -	1459·	Yacht - - -	683·3
Fifth Rate - -	1457·1	Troop Ship - -	1702·7
Sixth Rate - -	1541·	Training Brig - -	1088·6
Sloop - - -	1940·4	Receiving Ship - -	1777·1
Gun Vessel - -	2227·7	Surveying Vessel -	1787·5
Steam Vessel - -	1236·3	Floating Battery -	1716·6
Gunboat - - -	1381·3	Store Ship - -	1294·
Stationary Ship - -	679·8	Marine Detachment -	823·5

This Table shows the iron-clad vessels in a very favourable light, the ratio of the cases in them being considerably lower than in any of the rated vessels, and lower than in the sloops, gun-vessels, and gun-boats. The first-rate, which shows a lower ratio than the iron-clads, cannot be taken into consideration, as the only vessel of this class in the force was in commission only for a very short time, during which she was being paid off, a time when, as a rule, men rarely go on the sick-list, excepting for serious disease or injury.

The highest ratios of cases were in the gun-vessels, second-rates, sloops, and sixth-rates.

There

Introductory Observations.

GUN VESSELS.

There were gun-vessels on all the stations with the exception of the Home, Mediterranean, South East Coast of America, and Australian stations. As stated in the Statistical Abstract for 1866-67, these are vessels of a light draught of water, and are consequently liable to be employed nearer the shore and in more pestilential localities than heavier vessels. The highest ratio of cases shown by them was on the East Indies and Cape of Good Hope Station, where they were much employed in the Red Sea in connection with the Abyssinian Expedition.

SECOND RATE.

The high rate of cases in the second-rates was altogether owing to the numerous affections of a more or less severe character which prevailed in the Rodney, as a result of a long and tedious voyage from England to China, and subsequent exposure to disease at Hong Kong and Yokohama. The only other vessel of this class in the force was on her passage home from China, and employed paying off. Her ship's company appear to have been very healthy.

SLOOPS.

There were sloops in every squadron, with the exception of that on the Home Station. The highest ratio of cases shown by them was on the West Coast of Africa, and the next highest on the East Indies and Cape of Good Hope Station. On the former station the high ratio is attributable to the prevalence of fevers, diarrhœa, and catarrh; and on the latter to febrile and other affections resulting from exposure to a high temperature and the enervating effects of the climate of the Red Sea.

SIXTH RATES.

With the exception of the Mediterranean and South East Coast of America, vessels of the sixth rate were on every station, and in the Irregular Force. The highest ratio of cases shown by them was on the Pacific Station, the lowest on the China Station. On the former, the high ratio was attributable to febrile affections of various kinds, including an outbreak of yellow fever in one vessel, and to the prevalence of diarrhœa and syphilis, the latter disease being for the most part contracted at Valparaiso.

Invaliding.

During the twelve months embraced in this Abstract 1,748 persons were invalided, which is in the ratio of 34·7 per 1,000 of mean force, being an increase, compared with the preceding twelve months, to the extent of 6· per 1,000. It is, however, almost precisely the average invaliding rate of the total force taken for a period of twelve years, that being 34·6 per 1,000.

The following Table shows the invaliding rates on the different stations, and in the Irregular Force:—

Stations.	Ratio per 1,000 of Force Invalided.
Home	21·3
Mediterranean	27·8
North America and West Indies	41·6
South East Coast of America	25·9
Pacific	44·5
West Coast of Africa	86·5
East Indies and Cape of Good Hope	77·9
China	61·9
Australia	17·
Irregular Force	25·9

Compared with the preceding twelve months, there was an increase in the invaliding rate on all the stations, with the exception of the Home, Mediterranean, and South East Coast of America. There was also an increase in the Irregular Force.

On the North American and West Indian Station diseases of the respiratory organs caused the greatest loss of service by invaliding;—on the Pacific Station, functional and organic diseases of the heart, and rheumatism;—West Coast of Africa, the sequelæ of fevers, diseases of the respiratory organs, and rheumatism;—Cape of Good Hope and East Indies, diseases of the respiratory organs, debility, climatic

Introductory Observations.

cachexia, and rheumatism;—China, climatic cachexia, diseases of the respiratory organs, and various forms of syphilitic disease;—on the Australian Station, rheumatism;—and, in the Irregular Force, diseases of the organs of respiration.

Deaths.

The total number of deaths during the period of this Report was 558, of which 420 were occasioned by various forms of disease, and 138 by wounds and injuries, and drowning. The total death-rate was 11· per 1,000, which is below the average ratio of mortality of the Total Force, taken for twelve years, to the extent of 3·7 per 1,000. It is, however, ·6 per 1,000 above the death-rate of the preceding twelve months. The ratio of mortality from disease alone was 8·3 per 1,000.

The following Table shows the death-rates on the different stations during the period of this Return.

Stations.	Ratio of Deaths per 1,000 of Force.
Home	8·5
Mediterranean	9·9
North America and West Indies	9·3
South East Coast of America	19·2
Pacific	11·2
West Coast of Africa	20·4
East Indies and Cape of Good Hope	14·8
China	21·7
Australia	8·9
Irregular	9·1

In China the greatest mortality was from diseases of the alimentary canal, chiefly dysentery and cholera;—on the West Coast of Africa, remittent fevers and diseases of the lungs;—on the South East Coast of America, cholera;—on the Cape of Good Hope and East Indies station, diseases of the lungs, and of the brain and nervous system;—and, on the Mediterranean Station, enteric and remittent fevers.

Compared

Compared with the previous twelve months, there is an increase in the death-rate on the Home, Mediterranean, South East Coast of America, and Pacific stations; and a decrease on the North American and West Indian, West Coast of Africa, China, and Australian stations, and in the Irregular Force. The death-rate on the Cape of Good Hope and East Indies Station was precisely the same as in the preceding twelve months.

The following Table shows the deaths by violence on each Station, and their nature:—

Stations.	Killed by Falling from Aloft.	Drowned.	Wounds.		Suicide.	Various.			Total.
			In Action.	Accidental.		Murdered.	Accidentally Poisoned.	Alcoholic Poisoning.	
Home - - -	10	25	-	3	2	-	1	1	42
Mediterranean - -	3	5	-	2	-	-	-	-	10
North America and West Indies - - -	3	8	-	-	-	-	-	1	12
South East Coast of America . -	-	2	-	1	-	-	-	-	3
Pacific - - -	3	7	-	-	-	-	1	-	11
West Coast of Africa -	-	6	1	-	-	-	-	1	8
East Indies and Cape of Good Hope - -	1	10	-	3	-	1	-	-	15
China - - -	2	12	1	4	1	2	-	-	22
Australia - - -	1	2	-	-	-	-	-	-	3
Irregular - - -	3	8	-	1	-	-	-	-	12
Total - - -	26	85	2	14	3	3	2	3	138

There was a slight increase in the ratios of deaths occasioned by falling from aloft, and by drowning, compared with the preceding twelve months.

Alex. E. Mackay, M. D.

Admiralty, Somerset House,
15th January 1869.

HOME STATION.

Sick-Rate.

Average Ratio of Cases placed on the Sick-list for Twelve Years, 1041·8 per 1,000.

Home Station.

Seventy-one vessels of various classes were employed on the Home Station during the period embraced in the present Report. Sixteen of these—viz., fourteen iron-clads, one vessel of the fourth-rate, and one of the sixth-rate, which composed the Channel fleet—were the only ones employed on duties similar to those of vessels of squadrons on active service abroad. The remainder were for the most part either stationary ships, such as guardships, training vessels, and coastguard ships, or vessels only occasionally and irregularly employed at sea, such as small steam-tenders, training-brigs, store-ships, and yachts. The mean force corrected for time was 22,390; and the total number of cases of disease and injury entered on the sick-list 19,474, which is in the ratio of 869·7 per 1,000 of mean force, being a reduction, compared with the preceding twelve months, equal to 41·7 per 1,000.

IRON-CLADS.

The mean ratio of cases in the iron-clads was below that of the other two vessels of the Channel squadron. It was above the average ratio of the station, however, a circumstance readily to be accounted for by the fact that nearly three-fourths of the other vessels of the force were exempted from the exposure consequent upon active service at sea. It was also in excess of the mean ratio of cases in the same class of vessels during the previous twelve months.

On referring to Table 1 of the Appendix, it will be observed that the iron-clads showing the highest ratios of cases entered on the sick-list were the Warrior, the Defence, the Royal Oak, and the Pallas.

Home Station.

The high ratio of cases in the Warrior was almost altogether attributable to the prevalence of common catarrh and sore throat during the Christmas quarter of 1867, and the Lady and Midsummer quarters of 1868. Otherwise there does not appear to have been much sickness of any importance on board. The average number daily on the sick-list does not appear to have been more than at the rate of about four per cent. of the ship's company.

The Defence was a newly commissioned ship, and the returns from her are only for the first six months of 1868. Like the majority of vessels in the early part of their commission, her sick-list was chiefly composed of more or less trifling injuries, and of small abscesses or boils. During the months of January and February, when the weather was very inclement, a few cases of catarrh and sore throat occurred, but upon the whole there was little or no active disease of any kind in the ship.

Very nearly the same observations apply to the Royal Oak as have been made with reference to the Defence. The returns from this vessel also are for six months, she having only been commissioned in December 1867. Considering the large amount of leave the ship's company had, there were fewer cases of syphilitic disease than might have been anticipated, and such cases as occurred are said not to have been of great importance. This form of disease was chiefly contracted at Portsmouth, and testimony is borne to the beneficial operation of the Contagious Diseases Act there. At Portland, however, where a few cases of syphilis were contracted, and where the Preventive Act is not in operation, the disease is said to have been of a much more severe character.

The only point of interest in connection with the sick-rate of the Pallas was the occurrence of an epidemic of mumps during the Midsummer quarter of 1868. The disease was introduced into the ship by a young officer who is supposed to have contracted it on board a vessel lying in the same dock as the Pallas, and on board of which there was said to be a case of this disease. The epidemic was not very extensive, only sixteen persons altogether being attacked, and it spread quite irrespective of classes, the persons attacked being three officers, four seamen, two stokers, four boys, and three marines. During the Christmas quarter of 1867, when the vessel was at Lisbon, catarrh and sore throat were somewhat prevalent, and were attributed to atmospheric vicissitudes, warm middays being followed by cold chilly nights.

The

Home Station.

FOURTH RATE.

The ratio of cases in the Liffey, the only vessel of this class, was somewhat high. The most prevalent affections, however, were of a very trivial character. During a visit of the vessel to Cronstadt, in the Midsummer quarter of 1868, a few cases of diarrhœa occurred, consequent, it is said, upon drinking water which, although fresh, was not pure. Slight catarrhal affections were also common while the vessel lay there, daily variations of temperature being very common, usually to the extent of 20° to 25° in the twenty-four hours. General leave was given at Cronstadt, the only evil result in the form of disease being one case of gonorrhœa. Prostitution is under strict police surveillance there, and a wing of the Naval Hospital is said to be appropriated to the treatment of diseased women. From the fact that those who enter the hospital of their own accord are healed free of expense, while those who are detected to be diseased by the police have to pay for their treatment, the majority of the women are said to present themselves at a very early stage of the disease, and the arrangement appears in this respect to be very beneficial.

SIXTH RATE.

There was little or no disease of any importance in the Gladiator, the only vessel of this class in the force. During the Lady quarter of 1868, influenza prevailed amongst the ship's company, and sore throat was also common. The majority of the cases, however, were not of any severity, and many were of so slight a character as not to necessitate their being placed on the sick-list.

As was observed in the Statistical Abstract for 1866-67, but little of practical value would be gained by attemping to draw any comparison in respect to health or disease between the various classes of stationary ships and ordinary sea-going vessels, the conditions in which they are placed, and the duties devolving on their crews, being very dissimilar. In almost every training ship for cadets and boys, one or two cases of eruptive fever occurred, but in none was there any extensive epidemic. In the Boscawen, at Portland, there was one case of measles; in the Britannia, at Dartmouth, two of measles and one of small-pox; in the Ganges, at Falmouth, one of scarlatina; in the St. Vincent, at Portsmouth, eleven of measles, one of scarlatina, and one of small-pox; and in the Wellesley, also at Portsmouth, one of scarlatina. These vessels are stationed in localities where eruptive fevers are rarely absent, and almost their entire complements being boys, who are more or less in constant

Home Station.

communication with the shore, it is only surprising that those diseases are not more frequent.

There was little or no disease of any importance, either numerically or otherwise, in the other stationary vessels. In those in which the ratio of cases exceeded the average of the station, the affections were, as a rule, trifling, and do not call for any comments.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 25·2 per 1,000.

The total number of persons invalided for various forms of disease or injury was 477, which is in the ratio of 21·3 per 1,000 of mean force, being ·6 below the invaliding ratio of the preceding year, and the lowest ratio that has occurred in twelve years.

Of the total number invalided, three were for the sequelæ of fevers; seventy-five for diseases of the brain and nervous system; 112 for diseases of the organs of respiration; fifty-three for diseases of the heart and bloodvessels; three for affections of the alimentary canal; twenty-eight for diseases of the genito-urinary organs; sixty-three for rheumatism and diseases of the bones and joints; twenty-seven for diseases of the special senses; fifty-seven for diseases of the skin and cellular tissue; seventeen for various forms of dyspepsia and debility; and thirty-nine for wounds and injuries of various kinds.

Deaths.

Average Ratio of Mortality for Twelve years, 8·5 per 1,000.

The total number of deaths on the Home Station during the period of this Abstract was 192, of which 150 were occasioned by various forms of disease; and forty-two by wounds and injuries and drowning. The total ratio of mortality

Home Station.

mortality was 8·5 per 1,000 of mean force, which is precisely the mean ratio of the station taken for a period of twelve years, but an increase, compared with the preceding year, equal to 1·8 per 1,000.

Of the deaths from disease nineteen were occasioned by fever; fourteen by diseases of the brain and nervous system; fifty-seven by diseases of the respiratory organs; thirty-two by diseases of the heart and bloodvessels; eight by diseases of the alimentary canal; three by diseases of the liver; three by diseases of the genito-urinary organs; six by diseases of the bones and joints; one by purpura; one by cancer; one by pyæmia; and four by general cachexia.

The nature of the fatal casualties will be found in Table IV. of the Appendix to this station.

MEDITERRANEAN STATION.

SICK-RATE.

Average Ratio of Cases placed on the Sick-list for Twelve Years, 1465·2 per 1,000.

Mediterranean Station.

THE Squadron in the Mediterranean during the period embraced in this Report comprised seventeen vessels—viz. six iron-clads; two vessels of the fourth-rate; two sloops; two steam vessels; four gun-boats; and one receiving ship permanently stationed at Malta. The mean force corrected for time was 3,810, and the total number of cases entered on the sick-list 5,270, which is in the ratio of 1383·2 per 1,000 of mean force, which is a slight increase compared with the preceding year.

IRON-CLADS.

Only two of these vesels were on the station during the whole twelve months. The returns from each of the remainder are for six months. The mean ratio of cases in all the vessels was higher than during the preceding twelve months. This was partly attributable to so many of the vessels being in the first year of their commission, when as a rule trifling affections are numerous, and also to the prevalence of diarrhœa, catarrh, cynanche, and febrile affections in one or two of the vessels.

Although the ratio of cases entered on the sick-list of the Caledonia was below the mean ratio of the whole class, her ships' company appear to have suffered a good deal from diarrhœa in the Michaelmas quarter of 1867, and again in the Midsummer quarter of 1868; and from catarrhal affections during the Christmas quarter of 1867 and the Lady quarter following. In the month of August 1867 the vessel was at Spezia, where diarrhœa became very prevalent. It was ascribed to the combined influence of change of water, the consumption of fruit and acid wines, high diurnal temperature

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temperature, and excesses on the part of the men when on leave. There appears to have been a great deal of disease on shore, however, and a village close to the town of Spezia was visited by a severe epidemic, which, occurring almost exclusively among men employed in constructing new Government docks, was attributed to the excavation of a portion of ground near the village. During the prevalence of the epidemic all leave in the squadron was stopped, but previous to this three men of the Caledonia, who had been on shore on twenty-four hours' leave, contracted enteric fever, which in one instance proved fatal.

In the Midsummer quarter of 1868 the Caledonia was on coast of Syria, where a few cases of diarrhœa occurred amongst a number of officers and men who had visited Jerusalem and other places of interest, and were consequently subjected to a good deal of fatigue and exposure to the sun. On the return of the vessel to Malta, in the month of June, the cases of diarrhœa, combined with slight febrile attacks, became very numerous, and were attributed to the heat of the weather, which was most oppressive.

The catarrhal cases in this vessel, although numerous, were of slight importance, and the ship's company in other respects appear to have been healthy. The daily sick-list averaged about four per cent. of the complement.

The Enterprize shows the highest ratio of cases among the iron-clads. Her sick-list, however, was composed of very trifling affections, and there was no mortality in this vessel.

The sick-rate in the Lord Clyde was mainly composed of cases of ulcer, of a more or less trifling character, abscesses, and accidental injuries. In the Midsummer of 1868, when the vessel was on the coast of Syria, a good many cases of slight ephemeral fever occurred, consequent on the men exposing themselves much to the sun in visiting places of interest on shore.

The Lord Warden shows a high ratio of cases. This was almost altogether attributable to the prevalence of catarrhal cases in the Lady quarter of 1868, and of cases of diarrhœa in the Midsummer quarter. During the former quarter the vessel was stationed for a considerable time at the Piræus of Athens, and while there small-pox appeared on board and attacked eleven persons, one of whom, an officer, died. The disease was prevailing extensively on shore, chiefly among the

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Cretan refugees. During the Midsummer quarter, when a good many cases of diarrhœa occurred, the vessel was on the coast of Syria. They appear to have been of a very mild character, the average duration of each case being only three or four days. As in all newly commissioned ships, boils and abscesses were numerous.

The ratio of cases in the Prince Consort was much below the mean ratio of the class. There was, in fact, little or no disease of any moment on board. The cases of greatest numerical importance were catarrhal and bronchitic.

The ratio of cases in the Royal Oak was slightly above the average of the class. The casualties in this vessel in the Christmas quarter of 1867, when on the passage home to be paid off, were very numerous, no fewer than ninety-three cases of injury of various kinds having been placed on the sick-list. The majority of these occurred in Gibraltar, in the work of coaling the vessel. During the Michaelmas quarter of the year thirteen cases of febrile disease were placed on the sick-list: of these, two, of the enteric type, proved fatal. In one, the disease was probably contracted in Malta, and in the other at Spezia. A good many cases of diarrhœa also occurred at Spezia, and were attributed to over-indulgence in wine and fruit on shore. In other respects the health of this ship's company was satisfactory.

FOURTH RATE.

The Arethusa presents a high ratio of cases. This was mainly attributable to a somewhat extensive epidemic of diarrhœa which prevailed on board during the Michaelmas quarter of the year, when the vessel was at Spezia. The outbreak was considered to be caused by the drinking-water supplied at that place. A few cases of fever also occurred at the same place, two of an enteric character proving fatal.

There appears to have been a good deal of sickness and invaliding among the junior officers in this vessel. This, upon investigation, was considered to be dependent upon the over-crowding and imperfect ventilation of the gun-room. These defects were at once remedied, and the sickness disappeared.

During the Lady quarter of 1868, when the vessel was at the Piræus, small-pox appeared on board, and attacked twelve persons. The cases were for the most part modified, and no mortality resulted from them.

The

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The only other vessel of this class, the Endymion, appears to have been very healthy. While at Spezia, however, some cases of febrile disease occurred, and two of the enteric type proved fatal. Otherwise there was nothing to comment on in connection with this vessel.

SLOOPS.

Both vessels of the sloop class show low ratios of cases. In the Cruiser seven cases of fever of a continued type occurred during the Christmas quarter of 1867. Three of these were cases of enteric fever, one of which proved fatal. The disease was contracted at Malta, and was distinctly referable to exposure to sewage emanations when the vessel was in dock in that harbour. The emanations from the head of dockyard creek are said to have been most offensive at the time. In the cases which recovered, convalescence was very protracted.

The remaining four cases occurred at Beyrout, in the month of December.

The Racer appears also to have been very healthy. A few cases of diarrhœa which occurred on board during the Michaelmas 1867, were attributed to the use of the drinking-water supplied at the Piræus of Athens. The affection ceased immediately on condensed water being issued to the men.

STEAM VESSELS.

There is nothing in the returns from either of the two vessels of class employed on the station to call for comment.

GUN-BOATS.

In the Cockatrice, which shows the highest ratio of cases of any vessel of this class, the affections of greatest numerical importance were mild ephemeral fevers, and cases of ague which were attributable to exposure in the Danube, where the vessel was chiefly stationed. A fatal and, happily, a solitary case of typhus fever occurred at Galatz, where the disease is stated to have been prevailing on shore.

There was little or no disease of any importance in the other vessels of this class.

RECEIVING SHIP.

The ratio of cases in the Hibernia was very low, and her returns offer no subjects for comment.

Mediterranean Station.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 39·4 per 1,000.

The total number of persons invalided from the Mediterranean Squadron during the period of this return was 106; which is in the ratio of 27·8 per 1,000 of mean force, being below the average invaliding rate of the station to the extent of 11·6 per 1,000, and 3·7 below that of the preceding twelve months. In the iron-clad ships there was a decrease in the rate of invaliding, compared with the previous twelve months, equal to 10·8 per 1,000.

Of the total number invalided, nine were for the sequelæ of fever; eleven for diseases of the brain and nervous system; twenty-two for diseases of the organs of respiration; nine for diseases of the heart and bloodvessels; one for disease of the alimentary canal; two for diseases of the liver; four for diseases of the genito-urinary organs; seventeen for rheumatism and diseases of the bones and joints; one for disease of the special senses; eight for diseases of the skin and cellular tissue; seventeen for dyspepsia and climatic cachexia, and fifteen for wounds and injuries of various kinds, and hernia.

Deaths.

Average Ratio of Mortality for Twelve Years, 10·2 per 1,000.

There were thirty-eight deaths in the squadron during the twelve months, twenty-eight being from various forms of disease, and ten from wounds and injuries and drowning. The total death-rate was 9·9 per 1,000 of mean force, being fractionally below the average ratio of mortality of the station, but an increase, compared with the preceding year, equal to 3·4 per 1,000 This increase was almost altogether attributable to enteric fever contracted at Spezia, Malta, and elsewhere.

There

Mediterranean Station.

There were sixteen deaths from fevers, including the exanthemata. During the preceding twelve months there were only four deaths from this cause; two from diseases of the brain and nervous system; six from diseases of the organs of respiration; one from disease of the heart; one from inflammation of the bowels; one from disease of the kidneys; and one from erysipelas.

There were also ten deaths from wounds and injuries of various kinds and drowning, the details connected with which will be found in Table IV. of the Appendix to this station.

NORTH AMERICA AND WEST INDIES.

Sick Rate.

Average Ratio of Cases placed on the Sick-List for Twelve Years, 1591·6 per 1,000.

North American and West Indian Station.

The squadron on this station, during the twelve months embraced in this Abstract, comprised twenty-five vessels; viz., two iron-clads, four vessels of the fourth-rate, four of the sixth-rate, seven sloops, one gun-vessel, five gun-boats, one receiving ship permanently stationed at Jamaica, and one floating battery at Bermuda. The total mean force, corrected for time, was 4,900; but in consequence of no returns of cases having been received from the gun-boats, it becomes necessary, in estimating the total ratio of cases in the squadron, to make a reduction in the force equal to the complements of these vessels, and the force for this purpose will therefore be taken as 4,760. The total force, however, is taken in considering the invaliding and death rates, the necessary returns on those points having been rendered. The total number of cases entered on the sick-list was 7,364, which is in the ratio of 1547· per 1,000 of mean force, being an increase, compared with the preceding year, equal to 175·1 per 1,000.

IRON-CLADS.

There were only two vessels of this class in the squadron. In one of these the ratio of cases was considerably above the mean ratio of the station; in the other it was much below it. The mean ratio of both vessels was below the average sick-rate of the station. In the Favorite, in which the ratio of cases was highest, the diseases were for the most part of a comparatively trivial character. During the first six months embraced in this Report, when the vessel was stationed in the northern part of the station, rheumatic and catarrhal affections were the most numerous; and in the last

last six months, when she was employed at Bermuda and Jamaica, a good many men suffered from headache, probably consequent upon heat; and boils were very prevalent.

North American and West Indian Station.

The returns from the Royal Alfred are of a most satisfactory character. With the exception of a number of cases of catarrh during the Christmas quarter of 1867, when the vessel was for the most part stationed at Halifax, there was comparatively little or no sickness on board. The ratio of cases treated on board was fractionally within 500 per 1,000 of the average ratio of the station, taken for a period of twelve years.

FOURTH RATES.

There were four vessels of this class in the squadron. In two of these the ratio of cases was much above the mean ratio of the station; in the other two considerably below it. In the Aurora, which shows the highest sick-rate, diarrhœa was very prevalent in the month of August 1867, when the vessel was stationed at Quebec. The attacks were severe, and the discharges of a choleraic character; but they quickly yielded to treatment, the average duration of each case being under four days. During the Christmas quarter of the year the vessel encountered very heavy weather, which occasioned an outbreak of catarrh. With these exceptions, there was little or no sickness of any importance on board.

In the Constance, catarrhal affections were epidemic in the Midsummer quarter of 1868, when the vessel was at Halifax and Quebec. The attacks were rather sharp, each case being on an average eight days under treatment. But few of the crew escaped the affection in one form or other.

Three cases of yellow fever occurred in this vessel, two of which proved fatal. The disease was contracted at Jamaica, where it existed at the time. In the two fatal cases there was distinct evidence of communication with infected localities; but no information has been received as to the source from which the third case was infected.

A considerable number of cases of syphilis occurred amongst the crew. The disease was contracted at Port Royal, Jamaica, where it appears to abound.

There was no sickness of any importance in the remaining two vessels of this class.

North American and West Indian Station.

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SIXTH RATES.

The mean ratio of cases in this class of vessel was above the average of the station.

In the Niger, which shows the highest rate of cases, febrile affections, chiefly of a mild type, were prevalent throughout the year. One case of yellow fever is reported to have occurred at Vera Cruz, in the person of a young officer who had fatigued himself much while shooting, and had been exposed to great heat. He had also slept on shore. Being taken ill on shore, he was fortunately not brought on board, and no other cases occurred in the vessel. Diarrhœa was somewhat prevalent in the Michaelmas quarter of 1867 and the Lady quarter of 1868. Most of the cases were tedious, the average duration of each being eight or nine days. They were looked upon as being occasioned by malarious influences.

This vessel was on the southern division of the station during the whole twelve months.

In the Wolverene, which shows the next highest ratio of cases of this class of vessel, the most important disease, in point of numbers, was diarrhœa, which prevailed in an epidemic form in the Michaelmas quarter of 1867, when the vessel was at Montreal. The cases were of a mild character, and were attributed to atmospheric vicissitudes and dietetic errors.

In the Christmas quarter of the year, however, when the vessel was in the West Indies, among the Virgin Islands, seventeen cases of yellow fever occurred on board, of which four died. Very little information is given in the returns with reference to these cases.

The ratio of cases in the Jason was slightly below the average of the station. During most of the twelve months, indeed, the ship's company appears to have been very healthy; but in the Michaelmas quarter of 1867 a severe epidemic of fever occurred on board, subsequent to general leave being given at Port Antonio, on the north side of the Island of Jamaica. The vessel had been sent there in order to give leave, as cases of yellow fever continued to occur at Kingston. On the arrival of the ship at Port Antonio, the place was reported to be very healthy. Shortly after the return of the men from leave, cases of fever of a very suspicious character began to appear, and on the day following that on which the last party on leave returned to the ship, it was evident that yellow fever

North American and West Indian Station.

fever had made its appearance on board. An immediate start was made for Port Royal, where all the suspicious cases were at once landed; but, as other cases continued to occur, the vessel was ordered with all despatch to Halifax, where the epidemic ceased. Forty-five cases of fever, altogether, occurred at this time, of which ten are returned as yellow fever, twenty-eight as remittent, and seven as doubtful. One case only proved fatal.

The Cadmus shows a very low ratio of cases. Catarrhal and rheumatic affections were rather prevalent in the Lady quarter of 1868, when the vessel was lying at Halifax; but, with this exception, the ship's company may be said to have been very healthy.

SLOOPS.

There were seven vessels of this class, and the mean ratio of cases in them was a little above the average of the station. With the exception of a single case of yellow fever, which occurred in the person of a boy of the Barracouta, who appears to have contracted the disease at Port Royal, Jamaica, there was no disease of an urgent character in any of these vessels. The ship's company of the Fawn, which vessel shows the lowest ratio of cases of the class, were affected with catarrh in the Christmas quarter of the year, which was attributed to the vicissitudes of climate. In the Niobe, the most prevalent affections were catarrh and diarrhœa; and in the Royalist cases of ephemeral fever. These vessels were for the most part employed on the southern division of the station.

There was little or nothing worthy of commenting on in the other vessels of the squadron.

INVALIDING.

Average Ratio of Invaliding for Twelve Years, 26·9 per 1,000.

Two hundred and four persons were invalided for various forms of disease and injury, which is in the ratio of 41·6 per 1,000 of mean force, being an increase, compared with the previous twelve months, equal to 16· per 1,000 of mean force, and 14·7 above the average invaliding rate of the station.

North American and West Indian Station.

This increase, compared with the previous twelve months, was chiefly consequent upon the results of febrile diseases, diseases of the respiratory organs, of the heart, and of the genito-urinary organs.

Seventeen persons were invalided for the sequelæ of fever; seventeen for diseases of the brain and nervous system; forty-eight for diseases of the respiratory organs; twenty-six for diseases of the heart and bloodvessels; four for diseases of the alimentary canal; five for diseases of the liver; twenty-one for diseases of the genito-urinary organs; twenty-three for rheumatism and diseases of the bones and joints; seven for diseases of the special senses; twelve for diseases of the skin and cellular tissue; ten for dyspepsia and climatic cachexia; and fourteen for wounds and injuries, and hernia.

Deaths.

Average Ratio of Mortality for Twelve Years, 19·1 per 1,000.

Forty-six deaths, altogether, occurred in the squadron during the twelve months, thirty-four of these being from various forms of disease, and twelve from wounds and injuries, and drowning. The total ratio of mortality was 9·3 per 1,000 of mean force, being a reduction, compared with the preceding year, equal to 3·7 per 1,000, and 9·8 below the average death-rate of the station, taken for a period of twelve years. The death-rate, excluding wounds and injuries, and drowning, was 6·9 per 1,000.

There were seven deaths from yellow fever; four from diseases of the brain and nervous system; ten from diseases of the organs of respiration; seven from diseases of the heart; two from diseases of the genito-urinary organs; one from psoas abscess; one from erysipelas; one from dropsy; and one from pyæmia.

The details in connection with the deaths from wounds and injuries, and drowning, will be found on referring to Table IV. of the Appendix to this station.

SOUTH-EAST COAST OF AMERICA.

Sick-Rate.

Average Ratio of Cases placed on the Sick List for Twelve Years, 1677·6 per 1,000.

South East Coast of America Station.

The squadron on the South-East Coast of America during the period embraced in this Abstract consisted of twelve vessels—viz., one of the fourth-rate; two sloops; four steam-vessels; four gun-boats; and one receiving ship permanently stationed in the harbour of Rio de Janeiro. There was also a small detachment of Marines at the Falkland Islands. The mean force corrected for time was 1,040, and the total number of cases of disease and injury placed on the sick-list 1,639, which is in the ratio of 1,575·9 per 1,000, being an increase, compared with the preceding year, equal to 120·9 per 1,000, but considerably below the average ratio of the station taken for a period of twelve years.

FOURTH-RATE.

The ratio of cases entered on the sick-list of the Narcissus was considerably below the average of the station. An outbreak of cholera, however, occurred amongst the ship's company in the Lady quarter of the year, under the following circumstances. On the 6th of February 1868, the town of Monte Video being in a state of revolution, it was deemed necessary to land a detachment, consisting of 120 officers and men, to protect the custom-house; cholera was prevailing on shore. The detachment, however, returned on board on the 8th of February, all well. On the 19th of the same month, the revolution having again broken out, a detachment of 130 officers and men were landed for the protection of the custom-house, where they were quartered with detachments from the French, American, Spanish, and Italian ships. Cholera was still in the town, but on the decline. On the night of the 23rd of February two men of the detachment from the Narcissus were almost simultaneously attacked with

South East Coast of America Station.

FOURTH RATE. *continued.*

cholera. They were removed to the Civil Hospital, where both died. These cases were followed by eight more, and diarrhœa prevailed extensively. The detachment re-embarked on the 27th of February. Two cases of cholera proved fatal on board, but both the cholera and the diarrhœa were confined exclusively to the officers and men who were landed, very few of whom escaped a more or less severe attack of one or other form of disease. The French flag-ship, it is stated, lost one medical officer and ten men; the Americans suffered very little; the Spanish detachment was not attacked until fourteen days after its embarkation, and then the disease was mild, only one death resulting from it. The Italians had only a few cases of diarhœa.

In the Christmas quarter of 1867 a fatal case of enteric fever occurred on board. The disease spread to three of the man's messmates, who had been employed nursing him, and nearly proved fatal to them.

There were no other points of a noteworthy character in connection with this vessel.

SLOOPS.

The Dryad was only three months on the station. While in the tropics, on her passage to Rio de Janeiro, a considerable number of cases of ephemeral fever occurred on board; occasioned doubtless by the heat, which also caused headache, giddiness, and nausea in some of the men, without any marked febrile excitement. The other cases on the sick-list of this vessel were of a trivial character.

The other sloop, the Spiteful, was also only three months on the station. She was very healthy.

STEAM VESSELS.

Three cases of enteric fever occurred in the Nassau, one of which proved fatal. The disease was contracted at Rio de Janeiro in the Michaelmas quarter of 1867. Diarrhœa, in some cases of an obstinate character, was also somewhat prevalent amongst the men at the same time. With these exceptions there was no sickness of any importance in this vessel.

The Oberon was only three months on the station. She had arrived from the West Coast of Africa. There is nothing in her returns of any moment.

The ratio of cases in the Sharpshooter was above the average of the station. Catarrhal affections were those of greatest numerical importance, but some cases of fever occurred

occurred in the vessel at Rio de Janeiro, one of which, of the enteric type, proved fatal. South East Coast of America Station.

The returns from the Triton are very defective, being only for twenty-five days. There was no sickness of any moment on board.

The Doterel, Gleaner, and Spider were very healthy; and the only point of interest in the medical history of the Linnet was an outbreak of ague in the Midsummer quarter of 1868, during the whole of which the vessel was stationed in the River Paraguay. GUN-BOATS.

Although the ratio of cases in the Egmont was high, there was little or no disease of importance on board. In the Midsummer quarter of 1868 a considerable number of cases of mild ephemeral fever, and of diarrhœa, occurred, but with this exception there was nothing noteworthy in the medical history of the vessel. RECEIVING SHIP.

The men composing this detachment appear to have enjoyed excellent health. ROYAL MARINE DETACHMENT.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 31·4 per 1,000.

The total number of persons invalided during the period of this return was twenty-seven, being in the ratio of 25·9 per 1,000 of mean force, which is below the invaliding rate of the previous twelve months. More than one-half of the total number invalided were from the Narcissus.

One man was invalided for the sequelæ of fever; three for diseases of the brain and nervous system; six for diseases of the respiratory organs; one for disease of the liver; one for rheumatism; one for deafness; three for diseases of the skin and cellular tissue; three for general debility and climatic cachexia; and four for wounds and injuries of various kinds.

South East Coast of America Station.

DEATHS.

Average Ratio of Mortality for Twelve Years, 22·9 per 1,000.

THERE were twenty deaths in the squadron during the twelve months, seventeen being from various forms of disease, and three from wounds and injuries, and drowning. The total death-rate was 19·2 per 1,000 of mean force, which is an increase, compared with the previous twelve months, equal to 10·2 per 1,000. It is also a considerable increase over what may be considered the average normal death-rate of the station taken for a period of twelve years; for although the average ratio given above as 22·9 is strictly correct, it is an exceptional average in this respect, that it includes the great mortality occasioned by the loss of the Bombay in 1864, when one officer and ninety men were drowned. Deducting the deaths caused by that catastrophe, the average death-rate of the station for twelve years would be 16·7 per 1,000.

There were three deaths from enteric fever; three from diseases of the brain and nervous system; three from diseases of the respiratory organs; three from disease of the heart; four from cholera; one from disease of the liver; and three from wounds and injuries, and drowning, the particulars connected with which will be found by referring to Table IV. of the Appendix to this station.

PACIFIC STATION.

Sick Rate.

Average Ratio of Cases placed on the Sick List for Twelve Years, 1,570·6 per 1,000.

Pacific Station.

The squadron on the Pacific Station during the twelve months embraced in this Abstract comprised fourteen vessels—viz. one ironclad; one vessel of the fourth-rate; three of the sixth-rate; six sloops; one gun-vessel; one gun-boat; and one store-ship, permanently stationed at Valparaiso. There was also a detachment of Marines on the island of San Juan. The total mean force, corrected for time, was 2,490, which number will be taken in calculating the invaliding and death-rates; but for the ratio of cases, a reduction equal to the complement of a small gun-boat, from which no returns of cases have been obtained, requires to be made, which will reduce the force for this purpose to 2,450. The total number of cases of disease and injury entered on the sick-list was 4,451, which is in the ratio of 1816·7 per 1,000, being a slight increase, compared with the preceding year.

IRON-CLAD.

The only vessel of this class on the station, the Zealous, shows by much the lowest ratio of cases of any sea-going vessel of the squadron. During the whole twelve months, with the exception of a few days, she was stationed at Esquimault, Vancouver's Island, and it is in all probability to the healthiness of that locality that the high standard of health of this ship's company is mainly attributable. The only sickness on board was during the Lady quarter of 1868, when, in consequence of the severity of the weather, catarrhal affections were very prevalent.

FOURTH RATE.

The ratio of cases in the Topaze was below the average of the station for the period, but considerably above the average

Pacific Station.

FOURTH RATE. *continued.*

taken for a number of years. This vessel being employed on the southern division of the station, with her head quarters at Valparaiso, the ship's company suffered severely from venereal diseases contracted at that port, where they seem to abound and to be very virulent, no system of surveillance being adopted by the authorities. In the Christmas quarter of 1867, there were a good many cases of diarrhœa, which were attributed to the water supplied to the vessel at Valparaiso. Condensed water was substituted for it, and the disease disappeared. There was no other sickness of importance in this vessel.

SIXTH RATES.

The returns from the Clio give a very high ratio of cases. The diseases of greatest numerical importance were catarrhal and venereal, the latter contracted at Valparaiso. The proneness to febrile affections, which was remarked in connection with this ship's company in the Statistical Abstract of the Health of the Navy for the preceding twelve months, had almost altogether disappeared; but long exposure to the noxious influences of the climate of Mexico and Central America, in 1866, had very much debilitated the ship's company, and the long sea voyages the ship had been required to take after leaving Panama for Tahiti, and the consequent prolonged use of salt meat and want of vegetables, still further injuriously affected them. While at Tahiti, ulcers of a severe character became very prevalent, and a tendency to take on unhealthy action was noticed in every wound or abrasion. Unfortunately, fresh meat was not very plentiful at Tahiti, and vegetables were very scarce. Under these circumstances, the health of the men did not begin to show any decided signs of amendment until some time after her arrival at Valparaiso, when the numbers on the sick-list began gradually to diminish, and the diseases became more trivial.

The Malacca was employed during the greater part of the twelve months on the coast of Mexico and Central America. Her ship's company appear to have been singularly exempt from febrile diseases, not a single case of any form of fever appearing in her returns. Diarrhœa was frequent, however, and boils and ulcers very prevalent.

In the Statistical Abstract of the Health of the Navy for 1866-67, it was remarked that yellow fever had been imported into the Scout towards the close of the Midsummer quarter of 1867; that the first person attacked was the surgeon, who had been attending some sick poor on shore at Tobago, where the disease

disease was prevailing, and that in his case it proved rapidly fatal. He was taken ill on the 30th of June, and died on the 3rd of July. During the Michaelmas quarter of 1867, forty-two cases of fever occurred in this vessel, five only of which appear in the return as yellow fever; but all these proved fatal. There can be little doubt that a large number of the other cases of fever were mere modifications of the more formidable disease. Immediately on the true character of the fever being recognised, it was most prudently resolved to proceed to the northward, and the vessel at once started for Esquimault. Within a few days after leaving Tobago, the cases of fever became milder and more tractable, and the epidemic finally ceased. Pacific Station.

With the exception of a slight outbreak of influenza in the Midsummer quarter of 1668, when the vessel was at Esquimault, where measles had a week or two before been epidemic, there was nothing particularly calling for notice in the health-state of this ship. From some peculiar symptoms in connection with these cases of so-called influenza, it was thought probable that the disease was an undeveloped form of measles.

There is nothing in the returns from the Alert, Chanticleer, Columbine, and Mutine, calling for notice. The Cameleon had a good many cases of syphilis, contracted at Valparaiso, and diarrhœa was somewhat prevalent in the Midsummer quarter of 1868. No information, however, is given respecting it. In the Reindeer, which was stationed during the greater part of the twelve months on the coasts of Mexico and Central South America, periodic fevers were prevalent. SLOOPS

Venereal diseases and rheumatic affections constituted the largest proportion of the cases in the Sparrowhawk, the only vessel of this class in the squadron. The ship's company appear otherwise to have been very healthy. GUN VESSEL.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 32·9 per 1,000.

One hundred and eleven persons were invalided during the period of this return, being in the ratio of 44·5 per 1,000 of mean force, which is an increase to the extent of 14·2 per 1,000 compared with the preceding year.

Pacific Station.

Of the total number invalided, four were for the sequelæ of fever; seven for diseases of the brain and nervous system; sixteen for diseases of the respiratory organs; twenty-one for diseases of the heart and bloodvessels; three for diseases of the alimentary canal; two for diseases of the liver; sixteen for diseases of the genito-urinary organs; twenty-one for rheumatism and diseases of the bones and joints; one for disease of the special senses; three for diseases of the skin and cellular tissue; seven for debility and general cachexia; and ten for wounds and injuries of various kinds.

Death.

Average Ratio of Mortality for Twelve Years, 9·5 per 1,000.

There were twenty-eight deaths altogether in the squadron during the twelve months, seventeen being from various forms of disease, and eleven from wounds and injuries, and drowning. The total death rate was 11·2 per 1,000, which is 3·1 above the ratio of mortality of the preceding twelve months, and 1·7 above the average ratio for twelve years. This increase of mortality is altogether attributable to the outbreak of yellow fever in the Scout, and to the greater number of cases of fatal injury, and drowning.

Five persons died from yellow fever; two from diseases of the brain and nervous system; seven from diseases of the respiratory organs; one from disease of the heart; one from disease of the genito-urinary organs; one from psoas abscess; and eleven from wounds and injuries, and drowning, the particulars connected with which will be found by referring to Table IV. of the Appendix to this station.

WEST COAST OF AFRICA STATION.

Sick-Rate.

Average Ratio of Cases placed on the Sick-list, for Twelve Years, 1999·7 per 1,000.

West Coast of Africa Station.

The squadron on the West Coast of Africa during the period embraced in this Abstract, comprised twenty-three vessels; viz., one of the fourth-rate; two of the sixth-rate; two sloops; eleven gun-vessels; four steam-vessels; and three storeships. Of the latter, one was permanently stationed at Ascension, and another at Jellah Coffee. The mean force corrected for time was 1,860, and the total number of cases of disease and injury entered on the sick-list, 3,670, which is in the ratio of 1972·5 per 1,000 of mean force, being a reduction, compared with the previous twelve months, equal to 155·3 per 1,000, and slightly, as will be perceived, below the average of the station taken for twelve years. The periods for which returns were sent in from the different vessels, varied from three to twelve months. In several instances the returns are unfortunately defective.

FOURTH RATE.

The Bristol, the only vessel of this class in the squadron, was on the station about seven months. Although the ratio of cases entered on her sick-list was above the average of the station, it was considerably below that of the preceding year. There was very little active disease indeed on board, the majority of the affections under treatment being such as indicated a low state of the system among the men, viz., indolent and unhealthy ulcers, and obstinate boils. Under a liberal vegetable and animal diet at St. Helena, the health of the ship's company rapidly improved.

SIXTH RATE

Both vessels of this class show low ratios of cases. In the Danae, which was only three months on the station, the affections of most numerical importance were boils. In the Rattlesnake,

West Coast of Africa Station.

SIXTH RATE *continued.*

Rattlesnake, the returns from which are for six months, diarrhœa was prevalent in the Lady quarter of 1868. The disease appeared on two occasions during that period, and on both it was of a mild character. On the first occasion it was attributed to exposure while the men were employed removing the Vindictive at Jella Coffee; and on the second, to climatic influence when the vessel was stationed in the Bights. In the Midsummer quarter of the year, a number of cases of remittent fever occurred, consequent upon exposure at Lagos, in the River Congo, and at Loando. There was no other sickness of any importance in this vessel.

SLOOPS.

Both vessels of this class were on the station during the whole twelve months, and both show high ratios of sickness. In the Greyhound continued fevers were prevalent, but the majority of the cases were very mild. Slight cases of diarrhœa and catarrhal affections and boils were also frequent. The vessel left the station for the South East Coast of America towards the end of the Midsummer quarter of 1868.

The feature of most interest in the medical history of the Vestal was an outbreak of small-pox, which occurred while the vessel was at Ascension. Twenty-two cases in all occurred, of which two, in the persons of unvaccinated Kroomen, proved fatal. Of the total number of cases, fifteen occurred in the persons of Kroomen. In the Midsummer quarter of 1868, when the vessel was employed at St. Paul's de Loando, at Kabendas, and in the River Congo, there were thirty-one cases of remittent fever, for the most part of a very mild type.

GUN VESSELS.

The mean ratio of cases in this class of vessel was only slightly above the average of the station. The highest ratio of cases is shown by the Assurance; the lowest, by the Dart.

In the Assurance, fever was very prevalent in the Michaelmas quarter of 1867, when the vessel was employed at Loando, and in the River Congo; and twenty-two cases, classed as dyspepsia, which occurred during the same period, are attributed to the same malarious influences that caused the fever. Most of the febrile cases were of a mild character. Diarrhœa also was epidemic on board, in the Lady quarter of 1868, and was also referred to miasmatic agencies. During the whole time the vessel was on the Coast, dyspeptic cases were added to the sick-list, giving evidence of the deteriorating effect of the climate on the men.

The

West Coast of Africa Station.

The Dart, Espoir, Jaseur, Landrail, Mullet, Plover, Ranger and Speedwell were healthy.

In the Lee, which was chiefly employed cruizing on the Bights and in the River Congo, there was a considerable number of cases of fever, some of a periodic, but the majority of an ephemeral type. With this exception there is nothing of interest in the returns from this vessel.

There was no disease of any importance either in the Mullet or the Myrmidon.

STEAM VESSELS.

Very little can be said of these vessels, the returns from the majority of them being defective. A great deal of sickness occurred in the Investigator while employed on an expedition up the River Niger, in the Michaelmas quarter of 1867. The vessel having unfortunately grounded opposite some hostile villages, the ship's company were for five days constantly exposed to hard work and watching, the natives firing upon them during the whole time. Out of a complement of eighteen Europeans, and thirteen Africans, there were twenty-four cases of severe remittent fever, two of which proved fatal. There was also a death from insolation.

STORE SHIPS.

The only point of interest in connection with these vessels was the occurrence of a single case of yellow fever in the Dromedary. It occurred two days after leaving St. Paul's de Loando in the person of a petty officer whose duties brought him into frequent communication with the shore. It proved fatal on the fourth day, and fortunately the disease did not extend to the ship's company.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 56·3 per 1,000.

During the twelve months embraced in this Report, 161 persons were invalided for various forms of disease and injury, being in the ratio of 86·5 per 1,000 of mean force, which is considerably in excess of the invaliding rate of the previous twelve months, and 30·2 per 1,000 above the average ratio of the station. As might be anticipated, the sequelæ of fevers, diseases of the respiratory organs, and rheumatism, were the most prolific sources of invaliding.

West Coast of Africa Station.

Of the total number invalided, thirty-six were for the sequelæ of fever; eleven for diseases of the brain and nervous system; twenty for diseases of the organs of respiration; thirteen for diseases of the heart and blood-vessels; five for diseases of the alimentary canal; four for diseases of the liver; eleven for diseases of the genito-urinary organs; nineteen for rheumatism and diseases of the bones and joints; three for diseases of the special senses; six for diseases of the skin and cellular tissue; sixteen for climatic cachexia; and seventeen for wounds and injuries, and hernia.

Deaths.

Average Ratio of Mortality for Twelve Years, 28·2 per 1,000.

There were thirty-eight deaths in the squadron during the twelve months, of which thirty were from various forms of disease, and eight from wounds and injuries and drowning. The total death-rate was 20·4 per 1,000, being 2·2 per 1,000 below the death-rate of the preceding twelve months, and 7·8 below the average ratio of mortality of the station.

Of the thirty deaths from disease, ten were from the ordinary remittent fever of the station; one from debility following fever; one from yellow fever; two from small-pox; five from diseases of the brain and nervous system; six from diseases of the organs of respiration; one from disease of the heart; two from diseases of the alimentary canal; one from disease of the hip-joint; and one from psoas abscess.

The nature of the fatal injuries will be seen by referring to Table IV. of the Appendix to this station.

CAPE OF GOOD HOPE AND EAST INDIES.

Sick Rate.

Average Ratio of Cases placed on the Sick-List for Twelve Years, 1734·7 per 1,000.

Cape of Good Hope and East India Station.

Twenty vessels were employed upon this station during the period embraced in this Report, comprising one ship of the fourth rate; four of the sixth rate; seven sloops; three gun-vessels; one steam vessel; three troop-ships; and one receiving-ship, permanently stationed in Simon's Bay. The mean force, corrected for time, was 3,170, and the number of cases of disease and injury entered on the sick-list 6,470, which is in the ratio of 2041· per 1,000, being an increase, compared with the previous twelve months, equal to 279·8 per 1,000, an increase altogether attributable to the exposure entailed upon the squadron in the Red Sea, in connection with the Abyssinian expedition.

FOURTH RATE.

The ratio of cases entered on the sick-list of the Octavia, although still greatly in excess of the average of the station, was much below that of the preceding twelve months. During the Lady and Midsummer quarters of 1868, when employed in the Red Sea, and stationed almost altogether in Annesley Bay, the ship's company were unavoidably greatly exposed to the sun in disembarking cavalry horses, mules, bullocks, camels, elephants, and military stores, and in procuring water both for the troops on shore and for a portion of the merchant shipping. Considering the incessant nature of their labours, it is certainly wonderful that there should have been comparatively so little disease. The most prominent affections were fevers, principally of a mild character; diarrhœa; and dyspepsia and debility, the result of climatic influences. Towards the end of the Midsummer quarter the heat became very great and oppressive, and the men suffered much in consequence. Much benefit was derived from a trip

Cape of Good Hope and East India Station.

which was taken to Suez for change of air. During the cruise the weather was cool and invigorating.

During the Michaelmas and Christmas quarter of 1867, when the vessel was employed in the ordinary duties of the station, the ship's company seem to have enjoyed a very fair measure of health.

SIXTH RATES.

The only vessel of this class in which the ratio of cases entered on the sick-list exceeded the average of the station was the Satellite. This vessel arrived in Annesley Bay in October 1867, and during the following eight months was almost constantly at anchor in that locality. Shortly after her arrival at Zoola ulcers became numerous and obstinate, and the slightest wound was liable to take on an unhealthy action. Diarrhœa was also prevalent, and this (as well as a number of cases of fever that occurred at the same time) was attributed to the foul state of the beach off which the ships lay, the smell from which was excessively offensive, being occasioned by the decomposition of the dead bodies of various animals, mules and camels chiefly, which lay strewn about. This state of matters was speedily remedied, with great advantage to every one, and the various diseases which were so prevalent in the Satellite began to abate.

There was no disease of any importance in the Highflyer, Racoon, or Wasp. None of these vessels were employed in the Abyssinian expedition.

SLOOPS.

With the exception of the Lyra and Peterel, both of which show very low ratios of cases, all the vessels of this class were more or less employed in connection with the Abyssinian expedition, and in all the ratios of cases were greatly in excess of the average of the station. As might be expected, there was a considerable similarity in the nature of the affections most prevalent in the different vessels. Febrile affections of more or less gravity, dependent chiefly on insolation; vertigo, from the same cause; diarrhœa; slight wounds and ulcers, the results of injuries sustained in embarked and disembarking cattle. In all, the deteriorating influence of the climate and the injurious effects of exposure to the sun were manifested by the prevalence of cases of prostration and debility, necessitating men being placed on the sick-list, although exhibiting no marked symptom of disease of any kind.

GUN VESSELS.

In these vessels the ratios of cases were greatly in excess of the average of the station. They were all more or less employed

employed in the Red Sea with the Abyssinian expedition, and all suffered from the same affections as have been already noticed in connection with the other vessels of the squadron similarly employed. In the Midsummer quarter of 1868, forty-five men of the Star and thirty-six of the Vigilant were placed on the sick-list for debility. Diarrhœa was the most prominent affection in all these vessels.

Cape of Good Hope and East India Station.

The returns from the Hydra, the only vessel of this class on the station, are only for the first six months of 1868, and during that time she was not employed at Annesley Bay. The ratio of cases entered on her sick-list is very low. There was no disease, in fact, of any moment on board. The most important affections, numerically, were boils.

STEAM VESSEL.

These were newly commissioned vessels for service in transporting troops between Suez and the different Indian presidencies. Two of them, the Euphrates and the Jumna, show high ratios of cases. In the Malabar the ratio is, however, very low.

TROOP SHIPS.

In the Euphrates, which shows the highest ratio of cases of the class, febrile diseases were very prevalent. During the Michaelmas quarter of 1867 they were considered to be dependent on the deteriorating effects of a first long voyage through the tropics on a newly commissioned ship's company. During the same period, boils and ulcers were also numerous; and fifty-five men were placed on the list for debility. In the Midsummer quarter of 1868, an extensive outbreak of febrile disease occurred, consequent upon the ship's company being hulked on board an old wooden vessel that had been a paddle steamer in the Indian navy. When the disease was evidently becoming epidemic the hulk was abandoned, and the Euphrates ship's company comfortably accommodated in the Malabar, their own vessel being in dock. This change was attended with the best effect, the epidemic speedily disappearing. Thirteen cases of continued fever, four of remittent, and forty-three of what would appear to have been an irregular intermittent fever, were entered on the sick-list during this period.

There were no other points of interest in the medical history of this ship.

In the Jumna, which also shows a high ratio of cases, the most prevalent affections were fevers, of a more or less

 ephemeral

Cape of Good Hope and East India Station.

ephemeral character, and diarrhœa. The men appear to have suffered much from heat, and a good many cases of vertigo from insolation were placed on the sick-list.

There was nothing of any importance in the medical history of the Malabar, nor in that of the receiving-ship, the Seringapatam. In both vessels the ratio of cases was low.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 41·8 per 1,000.

Two hundred and forty-seven persons were invalided from the squadron during the period embraced in this Report. The ratio of invaliding was 77·9 per 1,000 of mean force, which is an increase, compared with the preceding twelve months, equal to 34·7 per 1,000. This high invaliding rate is entirely attributable to the exceptional nature of the duties in which the squadron was employed in the Red Sea. From the Octavia alone fifty-two persons were invalided; and from the three troop ships, sixty-eight.

Of the total number invalided, fourteen were for the sequelæ of fever; twenty for diseases of the brain and nervous system; twenty-eight for diseases of the respiratory organs; twenty for diseases of the heart and blood-vessels; twenty-seven for diseases of the alimentary canal; eleven for diseases of the liver and spleen; nineteen for diseases of the genito-urinary organs; twenty-three for rheumatism, and diseases of the bones and joints; five for diseases of the special senses; thirteen for diseases of the skin and cellular tissue; forty-five for debility and climatic cachexia; and twenty-two for wounds and injuries of various kinds, and hernia.

Deaths.

Average Ratio of Mortality for Twelve Years, 16·5 per 1,000.

There were forty-seven deaths in the squadron during the twelve months, which is in the ratio of 14·8 per 1,000, being precisely the same death-rate as obtained in the previous twelve

Cape of Good Hope and East India Station.

twelve months. Thirty-two deaths were from various forms of disease, and fifteen from wounds and injuries, and drowning.

Of the deaths from disease, four were from fever; eight from diseases of the brain and nervous system, three of these being from heat apoplexy; nine from diseases of the organs of respiration; two from diseases of the heart and blood vessels; five from diseases of the alimentary canal; two from diseases of the liver; one from abscess; and in one instance the cause of death is not stated.

The nature of the fatal injuries will be seen by referring to Table IV. of the Appendix to this station.

CHINA STATION.

Sick-rate.

Average Ratio of Cases placed on the Sick List for Twelve Years, 2117·6 per 1,000.

China Station.

Forty vessels were employed on the China Station during the twelve months embraced in this Abstract, viz.: one iron-clad; one ship of the second rate; three of the sixth rate; seven sloops; five gun-vessels; two steam-vessels; one troop ship; seventeen gunboats; two surveying vessels; and one receiving ship, permanently stationed at Hong Kong. The mean force corrected for time was 4,100, and the total number of cases of disease and injury entered on the sick-list, 7,479, which is in the ratio of 1824·1 per 1,000, being an increase, compared with the preceding twelve months, equal to 169·5 per 1,000, but still greatly below the average of the station taken for a period of twelve years.

IRON-CLAD.

The only Iron-clad vessel on the station, the Ocean, was very healthy. Catarrh and boils and abscesses were the affections of greatest numerical importance on board. In the Midsummer quarter of 1868, however, a great many cases of syphilis occurred, consequent on communication with Yokohama. With this exception there was no active disease of any moment in the ship.

SECOND RATE.

The Rodney only arrived on the station, after a long and tedious passage from England in the Michaelmas quarter of 1867, during which period catarrhal affections, the result of atmospheric vicissitudes, were very prevalent. During the Christmas quarter of 1867, when the vessel was at Hong Kong, diarrhœa became very prevalent, and a large amount of venereal disease was contracted there, as well as subsequently in the Lady and Midsummer quarters of 1868 at Yokohama.

Yokohama. The disease is said to have been of a most virulent character, and in the majority of instances to have been followed by constitutional symptoms in a more or less aggravated form. China Station. SECOND RATE continued.

The only vessel of this class which shows a high ratio of cases, was the Satellite, and she was only on the station for a very short time. A good many cases of remittent fever occurred amongst the ship's company in the Michaelmas quarter of 1867, consequent on exposure to malarious influences while employed in an expedition against pirates. With this exception there was no sickness of any importance in her returns. SIXTH RATE.

The other two vessels of this class were comparatively healthy.

The Argus and the Perseus show the highest ratios of cases of this class of vessel. In the former, the returns from which are only for the Michaelmas quarter of 1867, the ship's company suffered greatly from heat while stationed at Shanghai, and one death occurred from heat apoplexy. In the Perseus, diarrhœa was very prevalent during the autumn months of 1867. The majority of the cases were mild, but some were severe and accompanied with malarial fever. In the Lady quarter of 1868, when the vessel was employed on the southern division of the station, and particularly at the Andaman and Nicobar Islands, febrile affections became very frequent. The men were a good deal exposed at this time, and in the first week of January were on boat expeditions daily. With these exceptions the ship's company of the Perseus appear to have enjoyed a fair measure of health. SLOOPS.

Five cases of cholera occurred in the Rattler at Shanghai in the Michaelmas quarter of 1867. One of them proved fatal in four hours; the remainder, although in an extreme state of collapse, rallied and recovered. There was also a single and fatal case of cholera in the Rinaldo at Amoy during the same period. With these exceptions there was nothing noteworthy in the returns from the remaining vessels of this class.

All the Gun vessels were on the station during the whole twelve months, and in only one of them was the ratio of cases below the average of the station for the period. The Algerine was a good deal employed in river service, and, GUN VESSEL.

 probably

China Station.

GUN VESSEL *continued.*

probably as a consequence, cases of intermittent fever were common among her crew. In the Leven, which was chiefly stationed on the coast of Borneo, febrile affections were also frequent, and, in some instances, of considerable severity, one proving fatal. With the exception of two somewhat doubtful cases of scarlatina, there was nothing in the medical history of the Serpent to call for any remarks. The Slaney was much employed in river service during the twelve months, and her returns give a high ratio of cases. There was very little disease, however, of any importance among her ship's company.

STEAM VESSEL.

Both vessels of this class were on the station during the whole twelve months. The Manilla, which was almost altogether employed in Japan and in the north of China, shows a very low ratio of cases. The only point, indeed, in her medical history of a noteworthy character was the occurrence of four cases of small-pox when she was lying at Hiogo in the Lady quarter of 1868. They were all of a modified type.

The ratio of cases in the Salamis was somewhat high. Her men appear to have suffered a good deal from ague, contracted originally, it is stated, at Whampoa. The disease appears to have been of a particularly obstinate character, necessitating the invaliding of no fewer than eight men. With the exception of a slight outbreak of diarrhœa in the Christmas quarter of 1867, there was no other disease of importance in the ship.

TROOP SHIP.

The crew of the Adventure appear on the whole to have enjoyed a fair measure of health, and her ratio of cases is below the average of the station. On two separate occasions, however, one in the Michaelmas quarter of 1867, the other in the Midsummer quarter of 1868, the ship's company were visited with outbreaks of remittent fever, on both occasions referable to exposure to malarious influences when the vessel was in the dry dock at Aberdeen, Hong Kong.

RECEIVING SHIP.

The ratio of cases in the Princess Charlotte was high, as might be anticipated of a vessel permanently stationed in such a harbour as that of Hong Kong. Febrile affections, diarrhœa, and syphilis were most prominent in her returns. In the Midsummer quarter of 1868, enteric fever appeared on board, and proved fatal in two cases which were sent to hospital,

China Station.

RECEIVING SHIP *continued.*

hospital, as well as in two men of the Manilla who had been hulked on board the Princess Charlotte. As the cause of the disease was supposed to be generated on board the ship, prompt measures were taken for the removal of the ship's company, and a large number of coolies were employed to clear her out thoroughly. The bilges were washed out, disinfected with chloride of lime, and dried, and the whole ship ventilated and left clear for twenty-five days. No cases of fever occurred subsequently. The disease it appears existed on shore.

The returns from the remaining vessels of the squadron are more or less defective. There appears, however, to have been very little disease of an active character amongst them.

Invaliding.

Average Ratio of Invaliding to Twelve Years, 64·4 per 1,000.

Two hundred and fifty-four persons were invalided from the squadron during the twelve months embraced in this return, which is in the ratio of 61·9 per 1,000 of mean force, being a slight increase compared with the preceding twelve months, but, as will be seen, below the average invaliding rate of the station taken for a number of years.

Twenty persons were invalided for the sequelæ of fever; nineteen for diseases of the brain and nervous system; thirty-one for diseases of the organs of respiration; twenty three for diseases of the heart and bloodvessels; twenty-seven for diseases of the alimentary canal; eleven for diseases of the liver and spleen; thirty-one for diseases of the genito-urinary organs; twenty-six for rheumatism and diseases of the bones and joints; four for diseases of the special senses; eighteen for diseases of the skin and cellular tissue; thirty-three for debility and climatic cachexia; and eleven for wounds and injuries of various kinds.

Deaths.

Average Ratio of Mortality for Twelve Years, 39·2 per 1,000.

China Station.

The total number of deaths in the squadron was eighty-nine, which is in the ratio of 21·7 per 1,000 of mean force, being a decrease compared with the preceding twelve months equal to 5· per 1,000. Of these sixty-seven died from various forms of disease, and twenty-two from wounds and injuries and drowning.

There were eleven deaths from fever, including the exanthemata; nine from diseases of the brain and nervous system; eleven from diseases of the respiratory organs; four from diseases of the heart and bloodvessels; twenty-six from diseases of the alimentary canal; two from diseases of the liver; two from diseases of the genito-urinary organs, one being from syphilis; one from erysipelas; one from debility and ulcer; and twenty-two from wounds and injuries, and drowning, the details connected with which will be found by referring to Table IV. of the Appendix to this station.

AUSTRALIAN STATION.

SICK-RATE.

Average Ratio of Cases placed on the Sick List for Twelve Years, 1374·1 per 1,000.

Australian Station.

FIVE vessels were employed on the Australian station during the twelve months embraced in this Abstract. Of these, three were ships of the sixth rate, and two were sloops. There was also a small detachment of marines for a short time at Somerset, Cape York, North Australia. The mean force corrected for time was 1,115, and the total number of cases of disease and injury entered on the sick list 1,717, b ing in the ratio of 1539·9 per 1,000 of mean force, which, although somewhat below the ratio of cases during the preceding twelve months, is still greatly in excess of the average of the station taken for a number of years.

SIXTH RATE.

The ratio of cases placed on the sick list of the Brisk was high, compared with the other vessels of the same class. During the Christmas quarter of 1867, when the vessel was undergoing repairs at Sydney, an epidemic of diarrhœa, complicated in many cases with catarrhal symptoms, attacked the ship's company. During the month of December twenty-three cases of diarrhœa and twelve of catarrh were added to the sick list. These affections were attributed chiefly to atmospheric causes, the weather being changeable and the temperature very high. With this exception there was no sickness of a noteworthy character in this vessel.

The Challenger also suffered from epidemic diarrhœa and catarrh, while at Sydney, at the same time as the Brisk. In the Midsummer quarter of 1868, when enteric fever was very prevalent on shore at Sydney, several cases occurred on board this ship, four altogether. Although none of them

Australian Station.

proved fatal, the disease was of considerable severity, the average duration of each case being between five and six weeks. The cause of this outbreak was supposed to be vicissitudes of temperature, exposure to the sun, and to a vitiated atmosphere arising from the escape of the sewage of the town being in close proximity to where the ship was moored.

The ratio of cases entered on the sick list of the Charybdis was not only greatly below the average of the station for the period but below that taken for a period of twelve years. With the exception, indeed, of an outbreak of diarrhœa in the Lady quarter of 1868, and the occurrence of cases of enteric fever in the Midsummer quarter, when the vessel was at Sydney, there was little or no sickness of importance on board. One of the cases of enteric fever proved fatal. In the case of the Charybdis, as in that of the Challenger, the introduction of this dangerous form of fever amongst the ship's company, as well as the prevalence of cases of diarrhœa, accompanied with febrile symptoms, was attributed to the poisonous influences emanating from the locality where the vessel lay, which was not far from the mouth of the principal drain of the town.

SLOOP.

Although the ratio of cases in the Falcon was high, there was little or no sickness of importance amongst her ship's company. More or less trivial wounds and injuries, and boils and abscesses were the most prominent affections on her sick list.

In the Virago, also, the ratio of cases was high. When lying at Sydney in the Christmas quarter of 1867, diarrhœa became very prevalent and continued into the Lady quarter of 1868. During the latter period, also, on the voyage to Cape York, North Australia, when within the tropics, numerous cases of boils were placed on the sick list, but otherwise the ship's company appeared to have enjoyed good health.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 26·1 per 1,000.

Nineteen persons were invalided from the squadron during the twelve months, being in the ratio of 17· per 1,000

1,000 of mean force, which, though in a trifling degree above the invaliding rate of the preceding twelve months, is much below the average of the station taken for twelve years. Australian Station.

Of the total number invalided, three were for diseases of the brain and nervous system; four for diseases of the respiratory organs; two for diseases of the heart and blood-vessels; one for hæmatemesis; one for inflammation of the bladder; five for rheumatism and diseases of the bones and joints; two for dyspepsia and debility; and one for the effects of an injury.

Deaths.

Average Ratio of Mortality for Twelve Years, 13·5 per 1,000.

There were ten deaths in the squadron during the twelve months, seven of which were the result of various forms of disease, and three of injuries and drowning. The total death-rate was 8·9 per 1,000 of mean force, which is a reduction, compared with the preceding year, equal to 8·4 per 1,000, and also greatly below the average ratio of mortality of the station.

Of the deaths from disease, one was from enteric fever; one from disease of the brain and nervous system; four from inflammation of the lungs; two from disease of the heart; one from disease of the liver; and one from stricture of the urethra, death following an operation for the removal of the disease.

The particulars in connection with the deaths from violence will be found by referring to Table IV. of the Appendix to this station.

IRREGULAR FORCE.

Sick Rate.

Average Ratio of Cases placed on the Sick List for Twelve Years, 1568·9 per 1,000.

Irregular Force.

There were sixty-five vessels in the Irregular Force during the period of this Abstract, viz., three iron-clad vessels; one vessel of the first rate; one of the second rate; five of the fourth rate; one of the fifth rate; twelve of the sixth rate; twelve sloops; thirteen gun-vessels; two steam-vessels; nine troop-ships; four store-ships; one hospital-ship being navigated out to China; and one ship lent to the Colonial Government at Melbourne, and being navigated out to that place. The mean force corrected for time was 5,465, and the total number of cases of disease and injury entered on the sick-list, 7,463, which is in the ratio of 1365·5 per 1,000 of force, being 240·6 per 1,000 below the ratio of this force during the preceding twelve months, and also much below the average ratio taken for a number of years. The only ships which furnished returns for the whole twelve months were, one vessel of the fourth rate; six troop-ships; and one store-ship.

IRON-CLADS.

The mean ratio of cases in these vessels was above the average of the station taken for twelve years. In the Lord Warden, which shows the highest ratio, and the returns for which are for about five months, the chief affections numerically were catarrh, syphilis, and boils and abscesses. It is stated of this ship, that although the cases were numerous, no particular disease had prevailed, and that a large list is a common occurrence during the first months of a ship's commission.

The

Irregular Force.

The returns from the Ocean are for the Michaelmas quarter of 1867, during which the vessel was on her passage to China. She had been previously stationed in the Mediterranean, and while there, the ship's company suffered from febrile diseases and from diarrhœa. During the three months embraced in the present return, the febrile diseases continued, many of them being of considerable severity, and one proving fatal. The fever appears for the most part to have been of the ordinary remittent type of the Mediterranean. The outbreak ceased suddenly on the 17th of August, when the last case was entered on the sick-list, the vessel being at sea, a week out from Rio de Janeiro. Besides these cases of fever, catarrhs, rheumatisms, boils, and more or less severe injuries were numerous.

FIRST RATE.

The only vessel of this class, the Victoria, was paying off at Portsmouth, during the short period she was in the force. Her returns show a very low ratio of cases. Venereal diseases were, in fact, the only affections of importance on board.

SECOND RATE.

The Princess Royal was on the passage home from China, arriving at Plymouth on the 30th of July 1867, and being paid off on the 14th of August. During the six weeks embraced in her returns, the ship's company were very healthy, and the ratio of cases entered on the sick-list is exceedingly low.

FOURTH RATE.

The only vessel of this class which had a high ratio of cases, was the Bristol, the returns from which are for about five months, during which she was fitting out at Sheerness, and was subsequently employed cruising between England, the Azores, and Lisbon. During this time the affections which kept the sick-list high were of a more or less trivial character, boils and minor casualties preponderating.

FIFTH RATE.

Although the ratio of cases in the Terrible, the only vessel of this class in the force, was slightly above the average of the station for the period, there was little or no sickness of any importance among her ship's company. The returns from her are for the whole twelve months during which she was employed on particular service between England and the Mediterranean. In the Christmas quarter of 1867, when at Alexandria employed on duty in connection with the Abyssinian expedition, catarrh and diarrhœa were somewhat prevalent,

Irregular Force.

FIFTH RATE *continued.*

valent, and were attributed to the influence of climate, the weather being damp and raw in the mornings and evenings, with an interval of high temperature in the middle of the day.

SIXTH RATE.

The vessels of this class in which the ratios of cases were highest, were the Blanche, the Clio, the Esk, the Juno, and the Rattlesnake.

The Blanche, the returns from which are for about six months, was employed fitting out and on her passage to Australia. Considering that she was a newly-commissioned ship, and that she was making a long voyage, her ship's company appear to have enjoyed a fair measure of health. More or less trifling accidents formed the chief part of the sick-list.

The Clio was on her passage home from the Pacific in the Midsummer quarter of 1868, during which time the only noteworthy point in her medical history was the occurrence of some cases of fever, the majority being of a trifling character; but two or three were followed by protracted debility. Boils, also, as not uncommonly happens on a long voyage, were rather prevalent, but otherwise there was little or no sickness of any importance on board.

The returns from the Esk are for three months and a half, during which she was on her voyage home from Australia, and paying off at Plymouth. Catarrhal affections and rheumatism were frequent when in the latitude of Cape Horn, and boils became numerous as the ship passed through the tropics.

There was no disease of importance on the sick-list of the Juno; and boils, and wounds, and accidents constituted one-half of the sick-list of the Rattlesnake, the returns from which are for the Christmas quarter of 1867, when she was on her passage out to, and had arrived on, the West Coast of Africa.

Of the remaining vessels of the force, the troop-ship Jumna was the only one presenting any feature of interest, in a medical point of view. While on her voyage to India, and four days after leaving the Island of St. Vincent, an epidemic of choleraic diarrhœa broke out among the ship's company, and in the course of eleven days forty-six cases were entered on the sick-list. Some of these were of considerable severity, and one is returned as a case of cholera. In this instance the symptoms were certainly alarming, and the man's condition

dition very critical, but he recovered. Besides this epidemic there was a good deal of sickness among the engineers, stokers, and servants. This was attributed in a great measure to the large amount of work devolving upon these officers and men, but especially to the high temperature experienced at Diamond Harbour, in the River Hooghley. A death from heat apoplexy occurred, and several men were placed on the sick-list, suffering from insolation. Irregular Force.

Invaliding.

Average Ratio of Invaliding for Twelve Years, 24·4 per 1,000.

One hundred and forty-two persons were invalided from the Irregular Force during the twelve months embraced in this Abstract, being in the ratio of 25·9 per 1,000 of force, which is an increase, compared with the preceding twelve months, equal to 3·2 per 1,000, and also, as will be observed, slightly above the average invaliding rate of the force taken for twelve years.

Of the total number invalided, four were for the sequelæ of fevers; nineteen for diseases of the brain and nervous system; thirty for diseases of the organs of respiration; fourteen for diseases of the heart and blood-vessels; one for disease of the alimentary canal; two for diseases of the liver; eight for diseases of the genito-urinary organs; nine for rheumatism and diseases of the bones and joints; nine for diseases of the special senses; seven for diseases of the skin and cellular tissue; fifteen for dyspepsia and debility; and twenty-four for the effects of wounds and injuries of various kinds.

Deaths.

Average Ratio of Mortality for Twelve Years, 10·2 per 1,000.

There were fifty deaths in the force during the twelve months, thirty-eight of these being from disease in various forms, and twelve from wounds and injuries and drowning.

Irregular Force.

The total death-rate was 9·1 per 1,000, which is a decrease, compared with the preceding twelve months, equal to 3·3 per 1,000, and is also below the average death-rate of the force.

There were six deaths from fever; six from diseases of the brain and nervous system; ten from diseases of the organs of respiration; four from diseases of the heart and blood-vessels; five from diseases of the alimentary canal; four from diseases of the liver; one from disease of the genito-urinary organs; one from erysipelas and pyæmia; in one instance the cause of death is not stated; and twelve from wounds and injuries of various kinds, the details connected with which will be found by referring to Table IV. of the Appendix to this Force.

APPENDIX.

HOME STATION.

Table I.

Showing the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Iron-clad	Achilles	710	710	656	923·9
	Bellerophon	520	520	695	1336·5
	Defence	420	200	330	1650·
	Hector	350	60	41	683·3
	Lord Clyde	610	305	400	1311·4
	Minotaur	710	710	554	780·2
	Pallas	300	300	422	1406·6
	Prince Consort	635	160	197	1231·2
	Research	150	130	54	415·3
	Royal Oak	470	235	343	1459·5
	Viper	85	85	106	1247·
	Warrior	660	660	1,200	1818·1
	Waterwitch	75	75	70	933·3
	Wivern	150	150	160	1066·6
			4,300	5,228	1215·8
Fourth Rate	Liffey	460	420	763	1816·6
Sixth Rate	Gladiator	200	200	301	1505·
Stationary Ship.	Asia	1,510	1,510	629	419·2
	Cambridge	790	790	340	430·3
	Canopus	485	485	435	896·9
	*Cumberland	1,075	1,075	949	882·7

* Including Sheerness Naval Barracks.

APPENDIX—HOME STATION—TABLE I.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Stationary Ship—*cont*[d]	Duke of Wellington	685	685	841	1227·7
	Fisgard	350	350	351	1002·8
	Formidable	300	300	206	686·6
	Indus	1,000	1,000	598	598·
	Mersey	480	450	270	600·
	Nankin	70	70	23	328·5
	Royal Adelaide	365	365	191	523·3
	Victory	430	430	273	634·8
			7,510	5,106	679·8
Drill Ship	Brilliant	30	30	16	533·3
	Castor	50	50	40	800·
	Dædalus	50	50	45	900·
	Durham	35	35	28	800·
	Eagle	40	40	26	650·
	President	40	40	27	675·
	Trincomalee	30	30	16	533·3
	Winchester	35	35	34	971·4
			310	232	748·3
Coast Guard Ship.	Dauntless	170	170	201	1182·3
	Donegal	420	420	454	1080·9
	Duncan	420	420	189	450·
	Frederick William	330	330	172	521·2
	Irresistible	345	290	213	734·4
	Lion	405	405	459	1133·3
	Pembroke	190	190	242	1273·6
	Revenge	360	360	222	616·6
	Royal George	300	300	455	1516·6
	St. George	315	315	199	631·7
	Trafalgar	310	190	190	1000·
			3,390	2,996	883·7
Training Ship	Boscawen	470	470	186	395·7
	Britannia	400	400	215	537·5
	Excellent	1,175	1,175	843	717·4
	Ganges	550	550	852	1549·
	Implacable	500	500	273	546·
	Impregnable	830	830	540	650·6
	St. Vincent	830	830	555	668·6
	Wellesley	155	155	66	425·8
			4,910	3,530	718·9

APPENDIX—HOME STATION—TABLE I.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Steam Vessel	Buzzard	80	40	55	1375·
	Dasher	255	255	221	866·6
	Helicon	70	70	72	1028·5
	Jackal	60	60	35	583·3
	Lizard	45	45	50	1111·1
	Medusa	60	60	71	1183·3
			530	504	950·9
Yacht	Osborne	80	40	42	1050·
	Victoria and Albert	200	200	122	610·
			240	164	683·3
Gunboat	Orwell	40	40	66	1650·
Store Ship	Dee	75	50	30	600·
	Fox	105	50	75	1500·
			100	105	1050·
Training Brig	Ferret	90	90	52	577·7
	Liberty	125	95	159	1673·6
	Martin	100	100	70	700·
	Sealark	100	100	90	900·
	Squirrel	130	55	108	1963·6
			440	479	1088·6
	TOTAL		22,390	19,474	869·7
	Average Ratio for Twelve Years				1041·8

APPENDIX—HOME STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided: Number.	Invalided: Ratio per 1,000 of Force.
Iron-clad	Achilles	10	14·
	Bellerophon	8	15·3
	Defence	—	—
	Hector	—	—
	Lord Clyde	9	29·5
	Minotaur	18	25·3
	Pallas	13	43·3
	Prince Consort	1	6·2
	Research	2	15·3
	Royal Oak	5	21·2
	Viper	1	11·7
	Warrior	7	10·6
	Waterwitch	2	26·6
	Wivern	2	13·3
		78	18·1
Fourth Rate	Liffey	19	45·2
Sixth Rate	Gladiator	2	10·
Stationary Ship	Asia	27	17·8
	Cambridge	8	10·1
	Canopus	22	45·3
	Cumberland	14	13·
	Duke of Wellington	23	33·5
	Fisgard	13	37·1
	Formidable	6	20·
	Indus	28	28·
	Mersey	4	8·8
	Nankin	—	—
	Royal Adelaide	3	8·2
	Victory	16	37·2
		164	21·8

APPENDIX—HOME STATION—Table II.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Drill Ship - -	Brilliant - - -	—	—
	Castor - - - -	1	20·
	Dædalus - - -	1	20·
	Durham - - -	—	—
	Eagle - - - -	—	—
	President - - -	—	—
	Trincomalee - - -	—	—
	Winchester - - -	—	—
		2	6·4
Coast Guard Ship -	Dauntless - - -	12	70·5
	Donegal - - -	6	14·2
	Duncan - - - -	4	9·5
	Frederick William - -	9	27·2
	Irresistible - - -	11	37·9
	Lion - - - -	5	12·3
	Pembroke - - -	5	26·3
	Revenge - - -	2	5·5
	Royal George - -	6	20·
	St. George - - -	5	15·8
	Trafalgar - - -	2	10·5
		67	19·7
Training Ship -	Boscawen - - -	2	4·2
	Britannia - - -	—	—
	Excellent - - -	23	19·5
	Ganges - - - -	16	29·
	Implacable - - -	12	24·
	Impregnable - - -	46	55·4
	St. Vincent - - -	31	37·3
	Wellesley - - -	2	12·9
		132	26·8
Steam Vessel - -	Buzzard - - -	—	—
	Dasher - - - -	1	3·9
	Helicon - - - -	—	—
	Jackal - - - -	—	—
	Lizard - - - -	3	66·6
	Medusa - - - -	2	33·3
		6	11·3

APPENDIX—HOME STATION—TABLE II.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Yacht	Osborne	1	25·
	Victoria and Albert	1	5·
		2	8·3
Gunboat	Orwell	2	50·
Store Ship	Dee	—	—
	Fox	2	40·
		2	20·
Training Brig	Ferret	—	—
	Liberty	—	—
	Martin	—	—
	Sealark	—	—
	Squirrel	1	18·1
		1	2·2
	TOTAL	477	21·3
Average Ratio for Twelve Years			25·2

APPENDIX—HOME STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			
		From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad	Achilles	4	-	4	5·6
	Bellerophon	1	1	2	3·8
	Defence	1	-	1	5·
	Hector	—	—	—	—
	Lord Clyde	1	2	3	9·8
	Minotaur	1	3	4	5·6
	Pallas	—	—	—	—
	Prince Consort	2	-	2	12·5
	Research	1	1	2	15·3
	Royal Oak	1	-	1	4·2
	Viper	-	1	1	11·7
	Warrior	3	-	3	4·5
	Waterwitch	—	—	—	—
	Wivern	2	-	2	13·3
		17	8	25	5·8
Fourth Rate	Liffey	3	3	6	14·2
Sixth Rate	Gladiator	—	—	—	—
Stationary Ship.	Asia	13	3	16	10·5
	Cambridge	3	1	4	5·
	Canopus	5	1	6	12·3
	Cumberland	2	3	5	4·6
	Duke of Wellington	4	1	5	7·2
	Fisgard	3	-	3	8·5
	Formidable	3	1	4	13·3
	Indus	16	2	18	18·
	Mersey	2	1	3	6·6
	Nankin	2	-	2	28·5
	Royal Adelaide	4	-	4	10·9
	Victory	5	1	6	13·9
		62	14	76	10·1

APPENDIX—HOME STATION—Table III.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			
		From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Drill Ship	Brilliant	—	—	—	—
	Castor	1	-	1	20·
	Dædalus	—	—	—	—
	Durham	—	—	—	—
	Eagle	2	-	2	50·
	President	1	-	1	25·
	Trincomalee	—	—	—	—
	Winchester	—	—	—	—
		4	-	4	12·0
Coast Guard Ship.	Dauntless	3	2	5	29·4
	Donegal	2	1	3	7·1
	Duncan	5	2	7	16·6
	Frederick William	3	1	4	12·1
	Irresistible	1	-	1	3·4
	Lion	5	-	5	12·3
	Pembroke	—	—	—	—
	Revenge	1	-	1	2·7
	Royal George	3	-	3	10·
	St. George	3	-	3	9·5
	Trafalgar	5	1	6	31·5
		31	7	38	11·2
Training Ship	Boscawen	1	-	1	2·1
	Britannia	4	1	5	12·5
	Excellent	11	1	12	10·2
	Ganges	2	2	4	7·2
	Implacable	2	-	2	4·
	Impregnable	4	-	4	4·8
	St. Vincent	3	-	3	3·6
	Wellesley	—	—	—	—
		27	4	31	6·3
Steam Vessel	Buzzard	1	-	1	25·
	Dasher	1	2	3	11·7
	Helicon	1	1	2	28·5
	Jackal	—	—	—	—
	Lizard	-	1	1	22·2
	Medusa	—	—	—	—
		3	4	7	13·2

APPENDIX—HOME STATION—Table III.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			
		From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Yacht - -	Osborne - - -	—	—	—	—
	Victoria and Albert -	1	- -	1	5·
		1	- -	1	4·1
Gunboat -	Orwell - - -	—	—	—	—
Store Ship -	Dee - - -	1	- -	1	20·
	Fox - - -	1	1	2	40·
		2	1	3	30·
Training Brig	Ferret - - -	—	—	—	—
	Liberty - - -	- -	1	1	10·5
	Martin - - -	—	—	—	—
	Sealark - - -	—	—	—	—
	Squirrel - - -	—	—	—	—
		—	1	1	2·2
	TOTAL - - -	150	42	192	8·5
	Average Ratio for Twelve Years - - - -				8·5

APPENDIX—HOME STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad	Bellerophon	1	Fracture of skull; fell from fore-top.
	Lord Clyde	2	1 drowned; fell overboard from a lighter.
			1 drowned, while absent from the ship.
	Minotaur	3	2 fracture of skull; fell from aloft.
			1 concussion of brain; fell from aloft.
	Research	1	Fell overboard while intoxicated.
	Viper	1	Fracture of skull by a fall while on leave.
Fourth Rate	Liffey	3	1 fracture of skull; fell from aloft.
			1 drowned; fell from a shore-boat.
			1 tetanus, following compound fracture of leg.
Stationary Ship	Asia	3	1 drowned, by falling overboard.
			2 drowned, by upsetting of a boat.
	Cambridge	1	Fracture of skull, by a fall from the funnel.
	Canopus	1	Fracture of skull, by a water tank falling on his head.
	Cumberland	3	1 suicide; drowned.
			2 drowned; fell overboard.
	Duke of Wellington	1	Fell from aloft.
	Formidable	1	Found drowned in a moat.
	Indus	2	1 drowned; fell from landing stage.
			1 drowned while bathing.
	Mersey	1	Drowned while bathing.
	Victory	1	Fracture of skull; fell from aloft.

APPENDIX—HOME STATION—TABLE IV.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Coast Guard Ship	Dauntless - -	2	Drowned; fell overboard.
	Donegal - - -	1	Found drowned.
	Duncan - - -	2	1 drowned; fell out of a boat.
			1 drowned; boat upset.
	Frederick William -	1	Drowned from gunboat tender; not stated how.
	Trafalgar - -	1	Drowned; fell overboard.
Training Ship -	Britannia - -	1	Drowned, by the upsetting of a boat while fishing at night.
	Excellent - -	1	Accidentally poisoned by an overdose of morphia.
	Ganges - - -	2	1 fractured skull; fell from aloft.
			1 drowned; not stated how.
Steam Vessel	Dasher - - -	2	1 drowned, bathing.
			1 alcoholic poisoning, by drinking a pint of raw spirit.
	Helicon - - -	1	Fractured skull, by falling from aloft.
	Lizard - - -	1	Drowned; fell into a dock at night.
Store Ship - -	Fox - - - -	1	Drowned; suicide while in a state of insanity.
Training Brig -	Liberty - - -	1	Drowned; fell overboard from aloft.
	TOTAL - - -	42	

APPENDIX—HOME STATION—*continued.*

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			
		Number.	Ratio per 1,000 of Force.	Number	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad - - -	4,300	5,228	1215·8	78	18·1	17	8	25	5·8
Fourth Rate - - -	420	763	1816·6	19	45·2	3	3	6	14·2
Sixth Rate - - -	200	301	1505·	2	10·	–	–	–	–
Stationary Ship - -	7,510	5,106	679·8	164	21·8	62	14	76	10·1
Drill Ship - - -	310	232	748·3	2	6·4	4	–	4	12·9
Coast Guard Ship - -	3,390	2,996	883·7	67	19·7	31	7	38	11·2
Training Ship - - -	4,910	3,530	718·9	132	26·8	27	4	31	6·3
Steam Vessel - - -	530	504	950·9	6	11·3	3	4	7	13·2
Yacht - - - -	240	164	683·3	2	8·3	1	–	1	4·1
Gunboat - - - -	40	66	1650·	2	50·	–	–	–	–
Store Ship - - -	100	105	1050·	2	20·	2	1	3	30·
Training Brig - - -	440	479	1088·6	1	2·2	–	1	1	2·2
TOTAL - - -	22,390	19,474	869·7	477	21·3	150	42	192	8·5
Average Ratio for Twelve Years - -			1041·8	- -	25·2	- -	- -	- -	8·5

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	12,445	13,776	1106·5	- Not stated -		104	25	129	10·4
1857 - -	10,400	11,109	1068·4	340	32·7	86	25	111	10·7
1858 - -	12,600	15,710	1246·9	302	23·9	86	35	121	9·6
1859 - -	19,300	22,775	1180·	516	26·7	127	61	188	9·7
1860 - -	23,500	25,670	1092·3	690	29·4	193	70	263	11·2
1861 - -	22,900	24,525	1071·	715	31·2	157	63	220	9·6
1862 - -	20,760	23,641	1138·8	640	30·8	128	45	173	8·2
1863 - -	21,570	22,788	1056·4	625	28·9	107	46	153	7·
1864–5 -	20,810	20,899	1004·2	569	27·3	128	29	157	7·5
1865–6 -	22,225	20,279	911·9	482	21·6	106	26	132	5·9
1866–7 -	23,080	21,037	911·4	507	21·9	124	31	155	6·7
1867–8 -	22,390	19,474	869·7	477	21·3	150	42	192	8·5
TOTAL -	231,980	241,683	1041·8	5,863	25·2	1,496	498	1,994	8·5

APPENDIX—*continued.*

MEDITERRANEAN STATION.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Iron-clad	Caledonia	675	675	964	1428·1
	Enterprise	130	130	243	1869·2
	Lord Clyde	615	305	461	1511·4
	Lord Warden	600	300	523	1743·3
	Prince Consort	590	295	390	1322·
	Royal Oak	620	290	451	1555·1
			1,995	3,032	1519·7
Fourth Rate	Arethusa	505	505	876	1734·6
	Endymion	475	475	361	760·
			980	1,237	1262·2
Sloop	Cruiser	180	180	175	972·2
	Racer	130	130	128	984·6
			310	303	977·4
Steam Vessel	Caradoc	65	65	52	800·
	Psyche	65	65	110	1692·3
			130	162	1246·1
Gunboat	Cockatrice	50	50	142	2840·
	Trinculo	45	45	45	1000·
	Tyrian	40	40	80	2000·
	Wizard	45	45	94	2088·8
			180	361	2005·5
Receiving Ship.	Hibernia	215	215	175	813·9
	TOTAL		3,810	5,270	1383·2
	Average Ratio for Twelve Years				1465·2

APPENDIX—MEDITERRANEAN STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Iron-clad	Caledonia	21	31·1
	Enterprise	2	15·3
	Lord Clyde	8	26·2
	Lord Warden	15	50·
	Prince Consort	5	16·9
	Royal Oak	4	13·7
		55	27·5
Fourth Rate	Arethusa	17	33·6
	Endymion	13	27·3
		30	30·6
Sloop	Cruiser	10	55·5
	Racer	2	15·3
		12	38·7
Steam Vessel	Caradoc	2	30·7
	Psyche	2	30·7
		4	30·7
Gunboat	Cockatrice	—	—
	Trinculo	1	22·2
	Tyrian	1	25·
	Wizard	—	—
		2	11·1
Receiving Ship	Hibernia	3	13·9
	TOTAL	106	27·8
Average Ratio for Twelve Years			39·4

APPENDIX—MEDITERRANEAN STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			
		From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad	Caledonia	6	-	6	8·8
	Enterprise	—	—	—	—
	Lord Clyde	1	-	1	3·2
	Lord Warden	5	2	7	23·3
	Prince Consort	3	1	4	13·5
	Royal Oak	2	1	3	10·3
		17	4	21	10·5
Fourth Rate	Arethusa	4	1	5	9·9
	Endymion	4	2	6	12·6
		8	3	11	11·2
Sloop	Cruiser	1	1	2	11·1
	Racer	—	—	—	—
		1	1	2	6·4
Steam Vessel	Caradoc	1	1	2	30·7
	Psyche	—	—	—	—
		1	1	2	15·3
Gunboat	Cockatrice	1	-	1	20·
	Trinculo	—	—	—	—
	Tyrian	—	—	—	—
	Wizard	-	1	1	22·2
		1	1	2	11·1
Receiving Ship.	Hibernia	—	—	—	—
	TOTAL	28	10	38	9·0
	Average Ratio for Twelve Years				10·2

APPENDIX—MEDITERRANEAN STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad	Lord Warden	2	1 drowned; fell overboard.
			1 killed, by falling from a bastion.
	Prince Consort	1	Drowned while on leave.
	Royal Oak	1	Fell from aloft.
Fourth Rate	Arethusa	1	Drowned while bathing.
	Endymion	2	1 fractured skull; fell from aloft.
			1 dislocated spine; fell from aloft.
Sloop	Cruiser	1	Drowned by the swamping of a boat.
Steam Vessel	Caradoc	1	Drowned while away from the ship.
Gunboat	Wizard	1	Punctured wound of perinæum and traumatic peritonitis.
	TOTAL	10	

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Diseases and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Iron-clad - - -	1,995	3,032	1519·7	55	27·5	17	4	21	10·5
Fourth Rate - - -	980	1,237	1262·2	30	30·6	8	3	11	11·2
Sloop - - - - -	310	303	977·4	12	38·7	1	1	2	6·4
Steam Vessel - - -	130	162	1246·1	4	30·7	1	1	2	15·3
Gunboat - - - - -	180	361	2005·5	2	11·1	1	1	2	11·1
Receiving Ship - -	215	175	813·9	3	13·9	–	–	–	–
TOTAL - - -	3,810	5,270	1383·2	106	27·8	28	10	38	9·9
Average Ratios for Twelve Years - -			1465·2	- -	39·4	- -	- -	- -	10·2

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	11,090	15,153	1366·3	171	15·4	110	32	142	12·8
1857 - -	7,120	9,476	1330·9	208	29·2	53	24	77	10·8
1858 - -	5,390	7,381	1369·4	147	27·3	42	18	60	11·1
1859 - -	11,100	16,792	1512·2	416	37·5	90	35	125	11·2
1860 - -	14,210	20,915	1472·6	988	69·5	105	40	145	10·2
1861 - -	16,600	25,946	1561·2	753	45·4	134	38	172	10·4
1862 - -	9,950	15,423	1550·	350	35·1	70	27	97	9·7
1863 - -	8,470	13,844	1634·4	363	42·8	61	20	81	9·5
1864–5 -	8,045	10,723	1332·8	312	38·7	36	31	67	8·3
1865–6 -	6,340	9,366	1477·2	255	40·2	46	12	58	9·1
1866–7[c] -	5,380	7,231	1344·	170	31·5	27	8	35	6·5
1867–8 -	3,810	5,270	1383·2	106	27·8	28	10	38	9·9
TOTAL - -	107,505	157,520	1465·2	4,239	39·4	802	295	1,097	10·2

APPENDIX—*continued.*

NORTH AMERICA AND WEST INDIES STATION.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Iron clad -	Favorite - - -	270	270	525	1944·4
	Royal Alfred - -	660	660	721	1092·4
			930	1,246	1339·7
Fourth Rate	Aurora - - -	420	200	403	2015·
	Constance - -	525	525	1,004	1912·3
	Doris - - -	495	495	593	1197·9
	Phœbe - - -	500	375	326	869·3
			1,595	2,326	1458·3
Sixth Rate -	Cadmus - - -	280	260	245	942·3
	Jason - - -	260	260	399	1534·6
	Niger - -	185	185	468	2529·7
	Wolverene - -	270	180	371	2061·1
			885	1,483	1675·7
Sloop - -	Barracouta - -	175	175	212	1211·4
	Cordelia - - -	130	130	221	1700·
	Fawn - - -	190	180	172	955·5

APPENDIX—NORTH AMERICA AND WEST INDIES STATION—Table I.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Sloop—*cont^d.*	Gannet	130	130	169	1300·
	Niobe	125	125	302	2416·
	Royalist	120	30	72	2400·
	Sphinx	175	175	373	2131·4
		"	945	1,521	1609·5
Gun Vessel	Nimble	65	60	99	1650·
Gunboat	Britomart	40	30	47	1566·6
*Gunboats (4) not bearing a Medical Officer			140	—	—
Receiving Ship.	Aboukir	195	195	436	2235·8
Floating Battery and Dockyard.	Terror	240	120	206	1716·6
Force for estimating Cases			4,760	7,364	1547·
Total Force of Station corrected for time			4,900		
Average Ratio for Twelve Years					1591·6

* Returns incomplete.

APPENDIX—NORTH AMERICA AND WEST INDIES STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Iron-clad	Favorite	10	37·
	Royal Alfred	35	53·
		45	48·3
Fourth Rate	Aurora	3	15·
	Constance	22	41·9
	Doris	28	56·5
	Phœbe	14	37·3
		67	42·
Sixth Rate	Cadmus	10	38·4
	Jason	6	23·
	Niger	6	32·4
	Wolverene	3	16·6
		25	28·2
Sloop	Barracouta	12	68·5
	Cordelia	5	38·4
	Fawn	4	22·2

APPENDIX—NORTH AMERICA AND WEST INDIES—TABLE II.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Sloop—*continued* -	Gannet - - - -	7	53·8
	Niobe - - - -	4	32·
	Royalist - - -	4	133·3
	Sphinx - - - -	6	34·2
		42	44·4
Gun Vessel - -	Nimble - - - -	2	33·3
Gunboat - -	Britomart - - -	—	—
Gunboats (4) not bearing a Medical Officer -		1	7·1
Receiving Ship -	Aboukir - - -	11	56·4
Floating Battery and Dockyard.	Terror - - - -	11	91·6
	TOTAL - - -	204	41·6
	Average Ratio for Twelve Years - - -		26·9

APPENDIX—NORTH AMERICA AND WEST INDIES STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Iron-clad -	Favorite - -	4	1	5	18·5
	Royal Alfred - -	2	1	3	4·5
		6	2	8	8·6
Fourth Rate	Aurora - - -	1	- -	1	5·
	Constance - -	5	2	7	13·3
	Doris - - -	2	1	3	6·
	Phœbe - - -	1	- -	1	2·6
		9	3	12	7·5
Sixth Rate -	Cadmus - - -	1	1	2	7·6
	Jason - - -	1	- -	1	3·8
	Niger - - -	—	—	—	—
	Wolverene - -	4	4	8	44·4
		6	5	11	12·4
Sloop - -	Barracouta - -	1	- -	1	5·7
	Cordelia - - -	1	- -	1	7·6
	Fawn - - -	1	1	2	11·1

APPENDIX—NORTH AMERICA AND WEST INDIES STATION—TABLE III.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Sloop *cont^d.*	Gannet	-	1	1	7·6
	Niobe	1	-	1	8·
	Royalist	—	—	—	—
	Sphinx	1	-	1	5·7
		5	2	7	7·4
Gun Vessel	Nimble	—	—	—	—
Gunboat	Britomart	1	-	1	33·3
Gunboats (4)	not bearing a Medical Officer.	1	-	1	7·1
Receiving Ship.	Aboukir	3	-	3	15·3
Floating Battery and Dockyard.	Terror	3	-	3	25·
	TOTAL	34	12	46	9·3
	Average Ratio for Twelve Years				19·1

APPENDIX—NORTH AMERICA AND WEST INDIES STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries.
Iron-clad	Favorite	1	Fell from aloft.
	Royal Alfred	1	Drowned; *fell* overboard.
Fourth Rate	Constance	2	Fell from aloft.
	Doris	1	Alcoholic poisoning while on leave.
Sixth Rate	Cadmus	1	Drowned; fell over the edge of a wharf.
	Wolverene	4	1 drowned while bathing. 3 drowned by capsizing of a coal barge alongside the ship.
Sloop	Fawn	1	Drowned; fell overboard.
	Gannet	1	Drowned; fell overboard.
	TOTAL	12	

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Iron-clad - - -	930	1,246	1339·7	45	48·3	6	2	8	8·6
Fourth Rate - - -	1,595	2,326	1458·3	67	42·	9	3	12	7·5
Sixth Rate - - -	885	1,483	1675·7	25	28·2	6	5	11	12·4
Sloop - - - -	945	1,521	1609·5	42	44·4	5	2	7	7·4
Gun Vessel - - -	60	99	1650·	2	33·3	–	–	–	–
Gunboat - - -	30	47	1566·6	- -	- -	1	–	1	33·3
Gunboats (4) not bearing a Medical Officer -	140	- -	- -	1	7·1	1	–	1	7·1
Receiving Ship - -	195	436	2235·8	11	56·4	3	–	3	15·3
Floating Battery and Dockyard - - -	120	206	1716·6	11	91·6	3	–	3	25·
Force for estimating Cases	4,760	7,364	1547·	204	41·6	34	12	46	9·3
Total Force of Station corrected for time - -	4,900								
Average Ratios for Twelve Years - - -			1591·6	- -	26·9	–	–	–	19·1

Appendix—North America and West Indies Station—*continued.*

Table VI.

Showing the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

Year.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	Total.	
1856 - -	7,845	12,178	1552·3	184	23·4	177	29	206	26·3
1857 - -	3,640	6,141	1687·1	75	20·6	79	12	91	25·
1858 - -	2,600	5,046	1938·4	81	31·2	39	15	54	20·8
1859 - -	2,780	4,361	1568·7	70	25·2	18	8	26	9·4
1860 - -	2,250	4,011	1782·7	81	36·	87	12	99	44·
1861 - -	4,750	8,452	1779·4	172	36·2	172	28	200	42·1
1862 - -	10,135	16,543	1632·2	328	32·3	170	35	205	20·2
1863 - -	7,050	10,668	1513·1	186	26·3	34	22	56	7·9
1864–5 -	6,100	8,586	1391·7	15	25·	79	18	97	15·9
1865–6 -	5,400	8,979	1662·7	157	29·	28	25	53	9·8
1866–7 -	* 5,055 † 5,295	6,935	1371·9	136	25·6	52	17	69	13·
1867–8 -	* 4,760 † 4,900	7,364	1547·	204	41·6	34	12	46	9·3
Total - -	*62,365 †62,745	99,264	1591·6	1,689	26·	969	233	1,202	19·1

* For Cases. † For Invalidings and Deaths.

APPENDIX—*continued.*

SOUTH EAST COAST OF AMERICA.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force
Fourth Rate	Narcissus - -	525	525	771	1468·5
Sloop - -	Dryad - - -	140	35	96	2742·8
	Spiteful - - -	160	40	59	1475·
			75	155	2066·6
Steam Vessel	Nassau - - -	90	90	128	1422·2
	Oberon - - -	80	20	43	2150·
	Sharpshooter - -	80	80	145	1812·5
	Triton - - -	85	5	8	1600·
			195	324	1661·5
Gunboat -	Doterel - - -	40	40	43	1075·
	Gleaner - - -	35	20	8	400·
	Linnet - - -	40	30	71	2366·6
	Spider - - -	40	25	21	·840·
			115	143	1243·4
Receiving Ship.	Egmont - - -	110	110	238	2163·6
Marine Detachment, Falkland Isles		20	20	8	400·
	TOTAL - - -		1,040	1,639	1575·9
			Average Ratio for Twelve Years		1677·6.

APPENDIX—SOUTH EAST COAST OF AMERICA STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Fourth Rate	Narcissus	14	26·6
Sloop	Dryad	1	28·5
	Spiteful	1	25·
		2	26·6
Steam Vessel	Nassau	5	55·5
	Oberon	—	—
	Sharpshooter	1	12·5
	Triton	—	—
		6	30·7
Gunboat	Doterel	2	50·
	Gleaner	—	—
	Linnet	—	—
	Spider	—	—
		2	17·3
Receiving Ship	Egmont	3	27·2
Marine Detachment,	Falkland Isles	—	—
	TOTAL	27	25·9
	Average Ratio for Twelve Years		31·4

APPENDIX—SOUTH EAST COAST OF AMERICA STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Fourth Rate	Narcissus	11	2	13	24·7
Sloop	Dryad	1	—	1	28·5
	Spiteful	—	—	—	—
		1	—	1	13·3
Steam Vessel	Nassau	2	—	2	22·2
	Oberon	—	—	—	—
	Sharpshooter	2	1	3	37·5
	Triton	—	—	—	—
		4	1	5	25·6
Gunboat	Doterel	1	—	1	25·
	Gleaner	—	—	—	—
	Linnet	—	—	—	—
	Spider	—	—	—	—
		1	—	1	8·6
Receiving Ship.	Egmont	—	—	—	—
Marine Detachment, Falkland Isles		—	—	—	—
	TOTAL	17	3	20	19·2
Average Ratio for Twelve Years					22·9
Ditto — ditto — deducting for Men lost in "Bombay"					16·7

APPENDIX—SOUTH EAST COAST OF AMERICA STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Fourth Rate -	Narcissus - -	2	1 drowned; fell overboard while fishing.
			1 fractured skull, by fall while on leave.
Steam Vessel -	Sharpshooter - -	1	Drowned, by the capsizing of a canoe.
	TOTAL - - -	3	

TABLE V.

SHOWING the Comparative Sickness in the Different Classes of Ships.

Rate, &c.	Average Complements Corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Fourth Rate - - -	525	771	1468·5	14	26·6	11	2	13	24·7
Sloop - - - -	75	155	2066·6	2	26·6	1	—	1	13·3
Steam Vessel - - -	195	324	1661·5	6	30·7	4	1	5	25·6
Gunboat - - - -	115	143	1243·4	2	17·3	1	—	1	8·6
Receiving Ship - -	110	238	2163·6	3	27·2	—	—	—	—
Marine Detachment, Falkland Isles - - -	20	8	400·	—	—	—	—	—	—
TOTAL - - -	1,040	1,639	1575·9	27	25·9	17	3	20	19·2
Average Ratio for Twelve Years - - -			1677·6	- -	31·4	—	—	—	22·9
Deducting for Men lost in "Bombay" -		- -		- -	- -	—	—	—	16·7

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	1,200	2,697	2247·5	51	42·5	18	6	24	20·
1857 - -	1,560	2,818	1878·8	44	39·4	24	4	28	18·7
1858 - -	1,270	2,201	1733·1	44	34·6	34	5	39	30·7
1859 - -	1,000	1,690	1690·	35	35·	10	4	14	14·
1860 - -	1,250	1,770	1415·9	30	24·	11	6	17	13·6
1861 - -	1,120	1,563	1395·5	31	27·7	14	4	18	16·1
1862 - -	1,420	2,315	1630·2	58	40·8	13	11	24	16·9
1863 - -	1,370	2,096	1456·9	36	26·2	7	13	20	14·5
1864–5 -	1,040	1,948	1873·	28	26·9	6	102	108	103·8
1865–6 -	1,235	2,081	1685·	42	34·	10	4	14	11·3
1866–7 -	* 1,180 † 1,215	1,717	1455·	35	28·8	10	1	11	9·
1867–8 -	1,040	1,639	1575·9	27	25·9	17	3	20	19·2
TOTAL -	* 14,625 † 14 660	24,535	1677·6	461	31·4	174	163	337	22·9
					Average Ratio, deducting for Men lost in "Bombay" - - -				16·7

* For Cases. † For Invalidings and Deaths.

APPENDIX—*continued.*

PACIFIC STATION.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Iron-clad	Zealous	510	510	610	1196·
Fourth Rate	Topaze	450	450	816	1813·3
Sixth Rate	Clio	250	190	425	2236·8
	Malacca	235	235	476	2025·5
	Scout	245	245	494	2016·3
			670	1,395	2082·
Sloop	Alert	150	75	123	1640·
	Cameleon	170	130	296	2276·9
	Chanticleer	170	80	142	1775·
	Columbine	110	30	71	2366·6
	Mutine	150	150	259	1726·6
	Reindeer	170	170	491	2888·2
			635	1,382	2176·3
Gun Vessel	Sparrowhawk	80	80	189	1737·5
Gunboat	Forward	40	40	—	—
Store Ship	Nereus	45	45	51	1133·3
Marine Detachment, San Juan		60	60	58	966·6
Force for Estimating Cases			2,450	4,451	1816·7
TOTAL Force of Station corrected for time			2,490		
Average Ratio for Twelve Years					1570·6

APPENDIX—PACIFIC STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Iron-clad	Zealous	15	29·4
Fourth Rate	Topaze	16	35·5
Sixth Rate	Clio	11	57·8
	Malacca	11	46·8
	Scout	17	69·3
		39	58·2
Sloop	Alert	—	—
	Cameleon	3	23·
	Chanticleer	3	37·5
	Columbine	—	—
	Mutine	14	93·3
	Reindeer	14	82·3
		34	53·5
Gun Vessel	Sparrowhawk	2	25·
Gunboat	Forward	3	75·
Store Ship	Nereus	2	44·4
Marine Detachment, San Juan		—	—
	TOTAL	111	44·5
	Average Ratio for Twelve Years		32·9

APPENDIX—PACIFIC STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Iron-clad	Zealous	1	2	3	5·8
Fourth Rate	Topaze	1	—	1	2·2
Sixth Rate	Clio	3	—	3	15·7
	Malacca	1	3	4	17·
	Scout	6	4	10	40·8
		10	7	17	25·3
Sloop	Alert	—	—	—	—
	Cameleon	—	—	—	—
	Chanticleer	2	—	2	25·
	Columbine	—	—	—	—
	Mutine	—	—	—	—
	Reindeer	1	1	2	11·7
		3	1	4	6·2
Gun Vessel	Sparrowhawk	—	—	—	—
Gunboat	Forward	1	—	1	25·
Store Ship	Nereus	1	—	1	22·2
Marine Detachment, San Juan		—	1	1	16·6
	TOTAL	17	11	28	11·2
	Average Ratio for Twelve Years				9·5

APPENDIX—PACIFIC STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad - -	Zealous - - -	2	1 fell from aloft.
			1 drowned; fell from a bridge while intoxicated.
Sixth Rate - -	Malacca - - -	3	1 drowned; fell overboard by accident.
			2 fell from aloft.
	Scout - - -	4	1 poisoned accidentally.
			1 drowned while bathing.
			2 drowned while attempting to desert.
Sloop - -	Reindeer - -	1	Drowned; fell from aloft.
Marine Detachment.	San Juan - -	1	Drowned, by capsizing of a canoe.
	TOTAL - - -	11	

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Iron-clad - - -	510	610	1196·	15	29·4	1	2	3	5·8
Fourth Rate - - -	450	816	1813·3	16	35·5	1	–	1	2·2
Sixth Rate - - -	670	1,395	2082·	39	58·2	10	7	17	25·3
Sloop - - - -	635	1,382	2176·3	34	53·5	3	1	4	6·2
Gun Vessel - - -	80	139	1737·5	2	25·	–	–	–	–
Gunboat - - - -	40	- -	- -	3	75·	1	–	1	25·
Store Ship - - -	45	51	1133·3	2	44·4	1	–	1	22·2
Marine Detachment, San Juan.	60	58	966·6	- -		–	1	1	16·6
Force for estimating Cases TOTAL Force of Station corrected for time.	2,450 2,490	4,451	1816·7	111	44·5	17	11	28	11·2
Average Ratio for Twelve Years		- -	1570·6	- -	32·9	–	–	–	9·5

APPENDIX—PACIFIC STATION—*continued.*

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	2,680	4,102	1530·6	78	29·1	18	5	23	8·6
1857 - -	2,170	3,119	1437·3	57	26·3	16	4	20	9·2
1858 - -	2,310	3,199	1380·5	63	27·3	15	4	19	8·2
1859 - -	2,650	4,130	1558·5	71	26·8	26	8	34	12·8
1860 - -	3,490	5,848	1675·6	124	35·5	13	24	37	10·6
1861 - -	2,650	3,966	1496·6	96	36·2	14	7	21	7·9
1862 - -	2,760	4,132	1497·1	94	34·	16	8	24	8·6
1863 - -	3,220	4,516	1402·4	104	32·2	19	12	31	9·6
1864–5 -	2,330	3,670	1575·1	104	44·2	12	7	19	8·1
1865–6 -	2,775	4,581	1650·8	75	27·	14	14	28	10·
1866–7 -	* 2,525 † 2,565	4,563	1807·1	79	30·7	13	8	21	8·1
1867–8 -	* 2,450 † 2,490	4,451	1816·7	111	44·5	17	11	28	11·2
TOTAL - -	* 32,010 † 32,090	50,277	1570·6	1,056	32·9	193	112	305	9·5

* For Cases. † For Invalidings and Deaths.

APPENDIX—*continued.*

WEST COAST OF AFRICA STATION.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Fourth Rate	Bristol	530	310	651	2100·
Sixth Rate	Danae	220	55	81	1472·7
	Rattlesnake	305	155	237	1529·
			210	318	1514·2
Sloop	Greyhound	180	180	448	2488·8
	Vestal	160	160	378	2362·5
			340	826	2429·4
Gun Vessel	Assurance	100	100	379	3790·
	Dart	75	75	67	893·3
	Espoir	70	35	44	1257·1
	Jaseur	80	60	126	2100·
	Landrail	70	40	80	2000·
	Lee	70	55	131	2381·8
	Mullet*	70	70	120	1714·2
	Myrmidon*	100	25	76	3040·
	Plover	80	40	80	2000·
	Ranger	75	45	57	1266·6
	Speedwell	70	55	95	1727·2
			600	1,255	2091·6
Steam Vessel	Antelope*	90	90	148	1644·4
	Investigator*	40	10	—	—
	Oberon*	90	40	57	1425·
	Pioneer	40	10	9	900·
			150	214	1426·6
Store Ship	Dromedary	85	85	109	1282·3
	Flora	105	105	125	1190·4
	Vindictive	60	60	172	2866·6
			250	406	1624·
	TOTAL		1,860	3,670	1972·5
	Average Ratio for Twelve Years				1999·7

* Returns incomplete.

APPENDIX—WEST COAST OF AFRICA STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Fourth Rate	Bristol	22	70·9
Sixth Rate	Danae	1	18·1
	Rattlesnake	9	58·
		10	47·6
Sloop	Greyhound	20	111·1
	Vestal	17	106·2
		37	108·8
Gun Vessel	Assurance	—	—
	Dart	4	53·3
	Espoir	—	—
	Jaseur	3	50·
	Landrail	3	75·
	Lee	7	127·2
	Mullet	6	85·7
	Myrmidon	7	280·
	Plover	—	—
	Ranger	2	44·4
	Speedwell	3	54·5
		35	58·3
Steam Vessel	Antelope	5	55·5
	Investigator	5	500·
	Oberon	7	175·
	Pioneer	8	800·
		25	166·6
Store Ship	Dromedary	5	58·8
	Flora	21	200·
	Vindictive	6	100·
		32	128·
	TOTAL	161	86·5
	Average Ratio for Twelve Years		56·3

APPENDIX—WEST COAST OF AFRICA STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Fourth Rate	Bristol	3	1	4	12·9
Sixth Rate	Danae	—	—	—	—
	Rattlesnake	4	1	5	32·2
		4	1	5	23·8
Sloop	Greyhound	3	1	4	22·2
	Vestal	4	2	6	37·5
		7	3	10	29·4
Gun Vessel	Assurance	—	—	—	—
	Dart	—	—	—	—
	Espoir	—	—	—	—
	Jaseur	—	—	—	—
	Landrail	—	—	—	—
	Lee	—	1	1	18·1
	Mullet	1	—	1	14·2
	Myrmidon	—	—	—	—
	Plover	1	—	1	25·
	Ranger	—	—	—	—
	Speedwell	—	1	1	18·1
		2	2	4	6·6
Steam Vessel	Antelope	1	—	1	11·1
	Investigator	4	1	5	500·
	Oberon	2	—	2	50·
	Pioneer	—	—	—	—
		7	1	8	53·3
Store Ship	Dromedary	2	—	2	23·5
	Flora	4	—	4	38·
	Vindictive	1	—	1	16·6
		7	—	7	28·
	TOTAL	30	8	38	20·4
	Average Ratio for Twelve Years				28·2

APPENDIX—WEST COAST OF AFRICA STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Fourth Rate -	Bristol - - -	1	Drowned while diving.
Sixth Rate -	Rattlesnake - -	1	Drowned; fell overboard from aloft.
Sloop -	Greyhound - -	1	Drowned; fell overboard from aloft.
	Vestal - - -	2	1 Drowned; fell overboard from aloft. 1 alcoholic poisoning.
Gun Vessel -	Lee - - -	1	Drowned; boat capsized.
	Speedwell - -	1	Drowned; fell overboard from a stage.
Steam Vessel -	Investigator - -	1	Killed in action; gun-shot wound of abdomen.
	TOTAL - - -	8	

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Fourth Rate - - -	310	651	2100·	22	70·9	3	1	4	12·9
Sixth Rate - - -	210	318	1514·2	10	47·6	4	1	5	23·8
Sloop - - - -	340	826	2429·4	37	108·8	7	3	10	29·4
Gun Vessel - - -	600	1,255	2091·6	35	58·3	2	2	4	6·6
Steam Vessel - - -	150	214	1426·6	25	166·6	7	1	8	53·3
Store Ship - - -	250	406	1624·	32	128·	7	—	7	28·
TOTAL - - -	1,860	3,670	1972·5	161	86·5	30	8	38	20·4
Average Ratio for Twelve Years - -			1999·7	- -	56·3	- -	- -	- -	28·2

TABLE VI.

SHEWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	1,630	3,060	1877·3	74	45·4	20	10	30	18·4
1857 - -	1,620	3,497	2158·6	71	43·8	27	9	36	22·2
1858 - -	1,870	3,964	2119·8	105	56·1	26	13	39	20·8
1859 - -	1,590	3,289	2068·5	131	82·4	84	6	90	56·6
1860 - -	1,845	3,289	1807·1	73	40·1	32	8	40	22·
1861 - -	2,050	3,839	1872·7	78	38·	43	27	70	34·1
1862 - -	2,190	3,743	1709·1	51	23·2	36	12	48	21·9
1863 - -	1,930	3,830	1884·4	80	41·4	28	15	43	22·3
1864-5 -	1,620	3,476	2145·6	115	70·9	31	15	46	28·3
1865-6 -	1,455	3,449	2370·4	141	96·9	75	9	84	57·7
1866-7 -	1,635	3,479	2127·8	121	74·	31	6	37	22·6
1867-8 -	1,860	3,670	1972·5	161	86·5	30	8	38	20·4
TOTAL -	21,295	42,585	1999·7	1,201	56·3	463	138	601	28·2

APPENDIX—*continued.*

EAST INDIES AND CAPE OF GOOD HOPE STATION.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number	Ratio per 1,000 of Force.
Fourth Rate	Octavia - - -	545*	525	1,085	2066·6
Sixth Rate -	Highflyer - -	255	255	309	1211·7
	Racoon - - -	280	280	312	1114·2
	Satellite - - -	285	215	480	2232·5
	Wasp - - -	170	85	114	1341·1
			835	1,215	1455·
Sloop -	Argus - - -	170	130	327	2515·3
	Daphne - - -	155	115	260	2260·8
	Dryad - - -	140	105	363	3457·1
	Lyra - - -	100	50	46	920·
	Nymphe - - -	150	110	324	2945·4
	Peterel - - -	190	190	165	868·4
	Spiteful - - -	180	135	458	3392·5
			835	1,943	2326·9
Gun Vessel -	Penguin - - -	60	60	180	3000·
	Star - - -	95	95	390	4105·2
	Vigilant - - -	100	100	231	2310·
			255	801	3141·1
Steam Vessel	Hydra - - -	130	65	50	769·2
Troop Ship -	Euphrates - -	180	180	558	3100·
	Jumna - - -	255	190	429	2257·8
	Malabar - - -	205	155	221	1425·8
			525	1,208	2300·9
Receiving Ship.	Seringapatam - -	130	130	168	1292·3
	TOTAL - - -		3,170	6,470	2041·
	Average Ratio for Twelve Years - - -				1734·7

* Including Men for Transport Service.

APPENDIX—EAST INDIES AND CAPE OF GOOD HOPE STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Fourth Rate - -	Octavia - - - -	52	99·
Sixth Rate - -	Highflyer - - -	9	35·2
	Racoon - - - -	14	50·
	Satellite - - -	12	55·8
	Wasp - - - -	—	—
		35	41·9
Sloop - - -	Argus - - - -	21	161·5
	Daphne - - - -	8	69·5
	Dryad - - - -	13	123·8
	Lyra - - -	—	—
	Nymphe - - -	11	100·
	Peterel - - - -	4	21·
	Spiteful - - - -	12	88·8
		69	82·6
Gun Vessel - -	Penguin - - -	1	16·6
	Star - - - -	3	31·5
	Vigilant - - -	8	80·
		12	47·
Steam Vessel -	Hydra - - - -	1	15·3
Troop Ship - -	Euphrates - - -	23	127·7
	Jumna - - - -	31	163·1
	Malabar - - -	14	90·3
		68	129·5
Receiving Ship -	Seringapatam - -	10	76·9
	TOTAL - - -	247	77·9
Average Ratio for Twelve Years - - -			41·8

APPENDIX—EAST INDIES AND CAPE OF GOOD HOPE STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Fourth Rate	Octavia	6	1	7	13·3
Sixth Rate	Highflyer	5	1	6	23·5
	Racoon	2	3	5	17·8
	Satellite	1	1	2	9·3
	Wasp	-	1	1	11·7
		8	6	14	16·7
Sloop	Argus	—	—	—	—
	Daphne	1	2	3	26·
	Dryad	1	-	1	9·5
	Lyra	—	—	—	—
	Nymphe	2	-	2	18·1
	Peterel	2	2	4	21·
	Spiteful	1	1	2	14·8
		7	5	12	14·3
Gun Vessel	Penguin	—	—	—	—
	Star	2	1	3	31·5
	Vigilant	1	-	1	10·
		3	1	4	15·6
Steam Vessel	Hydra	—	—	—	—
Troop Ship	Euphrates	1	-	1	5·5
	Jumna	1	2	3	15·7
	Malabar	1	-	1	6·4
		3	2	5	9·5
Receiving Ship.	Seringapatam	5	-	5	38·4
	TOTAL	32	15	47	14·8
	Average Ratio for Twelve Years				16·5

APPENDIX—EAST INDIES AND CAPE OF GOOD HOPE STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Fourth Rate -	Octavia - - -	1	Fell from upper to lower deck.
Sixth Rate -	Highflyer - -	1	Drowned; not stated how.
	Racoon - - -	3	1 fell from aloft.
			1 drowned; fell from a boat.
			1 drowned; fell overboard from mizen chains.
	Satellite - - -	1	Drowned; fell overboard.
	Wasp - - -	1	Killed by explosion of an Armstrong gun.
Sloop - -	Daphne - - -	2	1 drowned; washed off bridge in a gale.
			1 drowned, while on leave.
	Peterel - - -	2	Drowned; boat capsized in a squall.
	Spiteful - - -	1	Drowned; fell overboard.
Gun Vessel -	Star - - -	1	Drowned; fell from a boat.
Troop Ship -	Jumna - - -	2	1 stabbed in abdomen while on leave in Suez.
			1 fracture of skull; fell from his hammock.
	TOTAL - - -	15	

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1.000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Fourth Rate - - -	525	1,085	2066·6	52	99.	6	1	7	13·3
Sixth Rate - - -	835	1,215	1455·	35	41·9	8	6	14	16·7
Sloop - - - -	835	1,943	2326·9	69	82.6	7	5	12	14·3
Gun Vessel - - -	255	801	3141·1	12	47·	3	1	4	15·6
Steam Vessel - - -	65	50	769·2	1	15·3	—	—	—	—
Troop Ship - - -	525	1,208	2300·9	68	129·5	3	2	5	9·5
Receiving Ship - -	130	168	1292·3	10	76·9	5	- -	5	38·4
TOTAL - - -	3,170	6,470	2041·	247	77·9	32	15	47	14·8
Average Ratios for Twelve Years - - -			1734·7	- -	41·8	- -	- -	- -	16·5

APPENDIX—EAST INDIES AND CAPE OF GOOD HOPE STATION—*continued.*

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	890	1,041	1170·9	36	40·5	7	10	17	19·1
1857 - -	1,060	1,366	1218·3	46	43·3	14	1	15	14·1
1858 - -	1,140	1,739	1525·5	29	25·4	12	6	18	15·8
1859 - -	1,160	1,539	1326·7	29	25·	8	4	12	10·3
1860 - -	1,570	2,199	1400·	49	31·3	11	7	18	11·4
1861 - -	1,880	3,797	2019·6	59	31·3	25	9	34	18·1
1862 - -	1,180	2,990	2533·8	38	32·2	5	23	28	23·7
1863 - -	1,350	2,576	1908·1	52	38·5	15	7	22	16·2
1864–5 -	2,200	3,223	1465·	82	37·2	30	14	44	20·
1865–6 -	2,030	3,603	1773·3	68	33·4	28	11	39	19·2
1866–7 -	1,550	2,730	1761·2	67	43·2	18	5	23	14·8
1867–8 -	3,170	6,470	2041·	247	77·9	32	15	47	14·8
TOTAL -	19,180	33,273	1734·7	802	41·8	205	112	317	16·5

APPENDIX—*continued.*

CHINA STATION.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Iron-clad -	Ocean - - -	625	470	670	1425·5
Second Rate	Rodney - - -	750	750	1,703	2270·6
Sixth Rate -	Pearl - - -	255	255	327	1282·3
	Pelorus - - -	280	140	93	664·2
	Satellite - - -	290	75	158	2106·6
			470	578	1229·7
Sloop - -	Argus - - -	170	45	109	2422·2
	Basilisk - - -	170	170	306	1800·
	Icarus - - -	120	120	257	2141·6
	Perseus - - -	175	175	427	2440·
	Rattler - - -	170	170	345	2029·4
	Rinaldo - - -	170	170	324	1905·8
	Zebra - - -	160	160	282	1762·5
			1,010	2,050	2029·7
Gun Vessel -	Algerine - - -	50	50	133	2660·
	Cormorant - - -	90	90	140	1555·5
	Leven - - -	50	50	143	2860·
	Serpent - - -	90	90	196	2177·7
	Slaney - - -	45	45	121	2688·8
			325	733	2255·3

APPENDIX—CHINA STATION—Table I.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Steam Vessel	Manilla	50	50	55	1100·
	Salamis	80	80	180	2250·
			130	235	1807·6
Troop Ship	Adventure	165	165	271	1642·4
Receiving Ship	Princess Charlotte	180	180	458	2544·4
Gunboat	Dove	40	10	8	800·
	Opossum	35	5	6	1200·
			15	14	933·3
Gunboats (15)	not bearing a Medical Officer		425	481	1131·7
Surveying Vessel.	Rifleman	85	70	77	1100·
	Sylvia	90	90	209	2322·2
			160	286	1787·5
	TOTAL		4,100	7,479	1824·1
	Average Ratio for Twelve Years				2117·6

APPENDIX—CHINA STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Iron-clad - -	Ocean - - - -	14	29·7
Second Rate - -	Rodney - - - -	63	84·
Sixth Rate - -	Pearl - - - -	7	27·4
	Pelorus - - - -	—	—
	Satellite - - -	2	26·6
		9	19·1
Sloop - - -	Argus - - - -	4	88·8
	Basilisk - - -	3	17·6
	Icarus - - - -	5	41·6
	Perseus - - -	22	125·7
	Rattler - - - -	15	88·2
	Rinaldo - - - -	6	35·2
	Zebra - - - -	5	31·2
		60	59·4
Gun Vessel - -	Algerine - - -	7	140·
	Cormorant - - -	3	33·3
	Leven - - - -	3	60·
	Serpent - - - -	8	88·8
	Slaney - - - -	4	88·8
		25	76·9

APPENDIX—CHINA STATION—Table II.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Steam Vessel -	Manilla - - -	2	40·
	Salamis - - - -	16.	200·
		18	138·4
Troop Ship - -	Adventure - - -	5	30·3
Receiving Ship -	Princess Charlotte - -	28	155·5
Gunboat - -	Dove - - - -	1	100·
	Opossum - - -	—	—
		1	66·6
Gunboats (15) not bearing a Medical Officer -		19	44·7
Surveying Vessel -	Rifleman - - -	3	42·8
	Sylvia - - - -	9	100·
		12	75·
	TOTAL - - -	254	61·9
Average Ratio for Twelve Years - - -			64 4

APPENDIX—CHINA STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Iron-clad -	Ocean - - -	3	2	5	10·6
Second Rate	Rodney - - -	9	3	12	16·
Sixth Rate -	Pearl - - -	4	- -	4	15·6
	Pelorus - - -	1	- -	1	7·1
	Satellite - - -	1	1	2	26·6
		6	1	7	14·8
Sloop - -	Argus - - -	2	- -	2	44·4
	Basilisk - - -	1	2	3	17·6
	Icarus - - -	4	2	6	50·
	Perseus - - -	2	2	4	22·8
	Rattler - - -	4	- -	4	23·5
	Rinaldo - - -	5	- -	5	29·4
	Zebra - - -	2	1	3	18·7
		20	7	27	26·7
Gun Vessel -	Algerine - - -	—	—	—	—
	Cormorant - -	- -	1	1	11·1
	Leven - - -	2	1	3	60·
	Serpent - - -	—	—	—	—
	Slaney - - -	1	2	3	66·6
		3	4	7	21·5

APPENDIX—CHINA STATION—Table III.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 Force.
		From Disease.	From Injury.	TOTAL.	
Steam Vessel	Manilla	3	-	3	60·
	Salamis	1	-	1	12·5
		4	-	4	30·7
Troop Ship	Adventure	4	1	5	30·3
Receiving Ship.	Princess Charlotte	4	2	6	33·3
Gunboat	Dove	1	1	2	200·
	Opossum	—	—	—	—
		1	1	2	133·3
Gunboats (15) not bearing a Medical Officer.		10	-	10	23·5
Surveying Vessel.	Rifleman	2	1	3	42·8
	Sylvia	1	-	1	11·1
		3	1	4	25·
	TOTAL	67	22	89	21·7
	Average Ratio for Twelve Years				39·2

APPENDIX—CHINA STATION—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad - -	Ocean - - -	2	1 killed by the accidental explosion of a gun. 1 found drowned while on leave.
Second Rate -	Rodney - - -	3	1 drowned; fell from aloft. 2 fractured skull; fell from aloft.
Sixth Rate -	Satellite - - -	1	Fractured skull; sustained on shore during operations against pirates.
Sloop - -	Basilisk - - -	2	1 suicide; pistol shot wound of chest. 1 killed by the accidental explosion of a cartridge.
	Icarus - - -	2	Murdered by Japanese while on leave.
	Perseus - - -	2	1 fractured skull, by explosion of gunpowder. 1 drowned; boat upset.
	Zebra - - -	1	Drowned; fell overboard.
Gun Vessel -	Comorant - -	1	Drowned; fell overboard.
	Leven - - -	1	Drowned by the capsizing of a canoe.
	Slaney - - -	2	1 drowned; fell overboard from a boat. 1 drowned attempting to save the above man's life.
Troop Ship -	Adventure - -	1	Drowned; fell overboard.
Receiving Ship -	Princess Charlotte -	2	1 concussion of brain; accident in engine-room of "Bouncer." 1 drowned.
Gunboat - -	Dove - - -	1	Drowned.
Surveying Vessel	Rifleman - -	1	Drowned; fell overboard while clearing a lead-line.
	TOTAL - - -	22	

APPENDIX—CHINA STATION—*continued.*

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Iron-clad - - -	470	670	1425·5	14	29·7	3	2	5	10·6
Second Rate - - -	750	1,703	2270·6	63	84·	9	3	12	16·
Sixth Rate - - -	470	578	1229·7	9	19·1	6	1	7	14·8
Sloop - - - -	1,010	2,050	2029·7	60	59·4	20	7	27	26·7
Gun Vessel - - -	325	733	2255·3	25	76·9	3	4	7	21·5
Steam Vessel - - -	130	235	1807·6	18	138·4	4	–	4	30·7
Troop Ship - - -	165	271	1642·4	5	30·3	4	1	5	30·3
Receiving Ship - -	180	458	2544·4	28	155·5	4	2	6	33·3
Gunboat - - -	15	14	933·3	1	66·6	1	1	2	133·3
Gunboats (15) not bearing a Medical Officer - -	425	481	1131·7	19	44·7	10	–	10	23·5
Surveying Vessel - -	160	286	1787·5	12	75·	3	1	4	25·
TOTAL - - -	4,100	7,479	1824·1	254	61·9	67	22	89	21·7
Average Ratios for Twelve Years - -			2117·6	- -	64·4	–	–	–	39·2

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	3,410	6,587	1931·7	71	20·8	92	24	116	34·
1857 - -	7,080	17,595	2485·2	378	53·4	243	85	328	46·2
1858 - -	11,300	29,990	2653·9	915	80·9	586	120	706	62·5
1859 - -	6,600	15,756	2387·9	555	84·1	206	116	322	48·8
1860 - -	8,540	15,501	1815·1	615	72·	214	30	244	28·6
1861 - -	5,860	11,543	1967·9	361	61·6	128	25	153	26·1
1862 - -	3,570	8,107	2270·7	167	46·7	204	33	237	66·3
1863 - -	5,240	10,706	2258·6	336	64·	116	51	167	31·8
1864–5 -	5,080	8,798	1731·8	333	65·5	104	42	146	28·7
1865–6 -	4,195	7,159	1706·5	230	54·8	74	15	89	21·2
1866–7 -	3,515	5,816	1654·6	202	57·4	71	23	94	26·7
1867–8 -	4,100	7,479	1824·1	254	61·9	67	22	89	21·7
TOTAL -	68,490	145,037	2117·6	4,417	64·4	2,105	586	2,691	39·2

APPENDIX—*continued.*

AUSTRALIAN STATION.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Sixth Rate -	Brisk - - -	205	205	323	1575·6
	Challenger - -	320	320	468	1462·5
	Charybdis - -	275	275	367	1334·5
			800	1,158	1447·5
Sloop - -	Falcon - - -	165	165	313	1896·9
	Virago - - -	145	145	242	1668·9
			310	555	1790·3
Marine Detachment, Somerset -		15	5	4	800·
	TOTAL - - -		1,115	1,717	1539·9
	Average Ratio for Twelve Years - - - -				1374·1

APPENDIX—AUSTRALIAN STATION—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Sixth Rate - -	Brisk - - - -	3	14·6
	Challenger - - -	7	21·8
	Charybdis - - -	8	29·
		18	22·5
Sloop - - -	Falcon - - - -	—	—
	Virago - - - -	1	6·8
		1	3·2
Marine Detachment, Somerset - - -		—	—
	TOTAL - - -	19	17·
Average Ratio for Twelve Years - - -			26·1

APPENDIX—AUSTRALIAN STATION—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Sixth Rate -	Brisk - - -	2	1	3	14·6
	Challenger - -	3	1	4	12·5
	Charybdis - -	1	- -	1	3·6
		6	2	8	10·
Sloop - -	Falcon - - -	1	1	2	12·1
	Virago - - -	—	—	—	—
		1	1	2	6·4
Marine Detachment, Somerset -		—	—	—	—
	TOTAL - -	7	3	10	8·9
	Average Ratio for Twelve Years - - - -				13·5

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Sixth Rate -	Brisk - - -	1	Fractured skull; fell from aloft
	Challenger - -	1	Drowned; fell overboard from a boat.
Sloop - -	Falcon - - -	1	Drowned; fell overboard from jibboom.
	TOTAL - - -	3	

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Diseases and Injury.		Invalided.		Number of Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Sixth Rate - - -	800	1,158	1447·5	18	22·5	6	2	8	10·
Sloop - - - - -	310	555	1790·3	1	3·2	1	1	2	6·4
Marine Detachment, Somerset - - - - -	5	4	800·	—	—	—	—	—	—
TOTAL - - -	1,115	1,717	1539·9	19	17·	7	3	10	8·9
Average Ratios for Twelve Years - -			1374·1	- -	26·1	- -	- -	- -	13·5

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	540	771	1427·8	37	68·5	3	6	9	16·6
1857 - -	390	546	1400·	10	25·6	1	1	2	5·1
1858 - -	380	520	1368·5	9	23·7	1	2	3	7·9
1859 - -	585	800	1367·4	24	41·	9	2	11	18·8
1860 - -	940	1,186	1261·7	22	23·4	5	8	13	13·8
1861 - -	945	1,249	1322·8	27	28·4	8	5	13	13·7
1862 - -	945	1,122	1187·3	12	12·6	4	5	9	9·5
1863 - -	580	715	1232·7	17	29·3	5	11	16	27·5
1864-5 -	1,310	1,679	1281·6	35	26·7	8	7	15	11·4
1865-6 -	1,080	1,595	1476·8	29	26·8	7	8	15	13·8
1866-7 -	980	1,553	1584·6	15	15·3	12	5	17	17·3
1867-8 -	1,115	1,717	1539·9	19	17·	7	3	10	8·9
TOTAL -	9,790	13,453	1374·1	256	26·1	70	63	133	13·5

APPENDIX—*continued.*

IRREGULAR FORCE.

TABLE I.

SHOWING the Number of Cases of Disease and Injury in each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio 1,000 of Force.
Iron-clad -	Lord Warden - -	540	210	445	2119·
	Ocean - - -	635	160	290	1812·5
	Penelope - -	350	20	4	200·
			390	739	1894·8
First Rate -	Victoria - - -	950	120	109	908·3
Second Rate	Princess Royal -	800	100	53	530·
Fourth Rate	Bristol - - -	500	185	296	1600·
	Galatea - - -	520	520	330	634·6
	Liverpool - -	640	80	48	600·
	Phœbe - - -	660	165	104	630·3
	Sutlej - - -	515	40	28	700·
			990	806	814·1
Fifth Rate -	Terrible - - -	315	315	459	1457·1
Sixth Rate -	Blanche - - -	180	85	191	2247·
	Clio - - -	225	55	100	1818·1
	Danae - - -	170	55	67	1218·1
	Eclipse - - -	175	15	12	800·
	Esk - - -	215	60	97	1616·6
	Juno - - -	195	30	53	1766·6
	Pelorus - - -	315	100	64	640·

APPENDIX—IRREGULAR FORCE—Table I.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Sixth Rate—*continued.*	Pylades	285	165	223	1351·5
	Rattlesnake	290	75	112	1493·3
	Scylla	280	35	10	285·7
	Valorous	230	50	41	820·
	Wasp	170	55	56	1018·1
			780	1,026	1315·3
Sloop	Alert	180	75	69	920·
	Cameleon	200	50	123	2460·
	Columbine	110	35	61	1742·8
	Daphne	160	40	68	1700·
	Lyra	120	40	52	1300·
	Nymphe	140	35	49	1400·
	Rapid	130	15	5	333·3
	Rosario	125	30	57	1900·
	Royalist	120	30	41	1366·6
	Salamander	100	50	127	2540·
	Shearwater	120	70	165	2357·1
	Virago	225	55	121	2200·
			525	938	1786·6
Gun Vessel	Avon	80	15	39	2600·
	Beacon	65	30	51	1700·
	Cygnet	65	10	19	1900·
	Dwarf	70	20	39	1950·
	Gnat	70	10	4	400·
	Jaseur	70	10	11	1100·
	Lee	60	15	41	2733·3
	Myrmidon	90	15	28	1866·6
	Pandora	80	20	41	2050·
	Philomel	85	15	33	2200·
	Plover	80	20	21	1050·
	Snipe	60	5	4	800·
	Speedwell	70	10	17	1700·
			195	348	1784·6
Steam Vessel	Hydra	125	50	64	1280·
	Newport	60	15	11	733·3
			65	75	1153·8

APPENDIX—IRREGULAR FORCE—Table I.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.	
				Number.	Ratio per 1,000 of Force.
Troop Ship -	Crocodile - -	245	245	199	812·2
	Himalaya - -	215	215	425	1976·7
	Jumna - - -	220	55	278	5054·5
	Malabar - - -	260	65	107	1646·1
	Orontes - - -	190	110	150	1363·6
	Serapis - - -	245	245	294	1200·
	Simoom - - -	205	205	204	995·1
	Tamar - - -	230	230	438	1904·3
	Urgent - - -	150	150	189	1260·
			1,520	2,284	1502·6
Store Ship -	Hesper - - -	70	15	30	2000·
	Industry - - -	60	60	68	1133·3
	Megæra - - -	165	165	131	793·9
	Supply - - -	60	35	76	2171·4
			275	305	1109·
Hospital Ship (China).	*Meeanee - -	335	85	191	2247·
Ship (lent to Colonial Government at Melbourne).	*Nelson - - -	210	105	130	1238·
			190	321	1689·4
	TOTAL - - -		5,465	7,463	1365·5
	Average Ratio for Twelve Years - - - -				1568·9

* Being navigated out.

APPENDIX—IRREGULAR FORCE—*continued.*

TABLE II.

SHOWING the Number of Men Invalided from each Ship, and the Ratio per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Iron-clad	Lord Warden	8	38·
	Ocean	8	50·
	Penelope	—	—
		16	41·
First Rate	Victoria	6	50·
Second Rate	Princess Royal	10	100·
Fourth Rate	Bristol	3	16·2
	Galatea	2	3·8
	Liverpool	—	—
	Phœbe	4	24·2
	Sutlej	1	25·
		10	10·1
Fifth Rate	Terrible	11	34·9
Sixth Rate	Blanche	4	47·
	Clio	—	—
	Danae	1	18·1
	Eclipse	—	—
	Esk	1	16·6

APPENDIX—IRREGULAR FORCE—Table II.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Sixth Rate—*continued.*	Juno	2	66·6
	Pelorus	2	20·
	Pylades	4	24·2
	Rattlesnake	3	40·
	Scylla	—	—
	Valorous	—	—
	Wasp	1	18·1
		18	23·
Sloop	Alert	—	—
	Cameleon	—	—
	Columbine	—	—
	Daphne	3	75·
	Lyra	—	—
	Nymphe	1	28·5
	Rapid	—	—
	Rosario	1	33·3
	Royalist	—	—
	Salamander	—	—
	Shearwater	1	14·2
	Virago	4	72·7
		10	19·
Gun Vessel	Avon	—	—
	Beacon	—	—
	Cygnet	1	100·
	Dwarf	—	—
	Gnat	—	—
	Jaseur	2	200·
	Lee	—	—
	Myrmidon	—	—
	Pandora	1	50·
	Philomel	—	—
	Plover	—	—
	Snipe	—	—
	Speedwell	—	—
		4	20·5

APPENDIX—IRREGULAR FORCE—Table II.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Invalided.	
		Number.	Ratio per 1,000 of Force.
Steam Vessel -	Hydra - - - -	3	60·
	Newport - - -	—	—
		3	46·1
Troop Ship - -	Crocodile - - -	5	20·4
	Himalaya - - -	9	41·8
	Jumna - - - -	10	181·8
	Malabar - - -	—	—
	Orontes - - -	1	9·
	Serapis - - - -	13	53·
	Simoom - - -	3	14·6
	Tamar - - - -	2	8·6
	Urgent - - - -	5	33·3
		48	31·5
Store Ship - -	Hesper - - - -	—	—
	Industry - - -	2	33·3
	Megæra - - -	2	12·1
	Supply - - - -	2	57·1
		6	21·8
	TOTAL - - - -	142	25·9
	Average Ratio for Twelve Years - -		24·4

APPENDIX—IRREGULAR FORCE—*continued.*

TABLE III.

SHOWING the Number of Deaths from Disease and Injury in each Ship, and the Ratio of Mortality per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Iron-clad	Lord Warden	2	-	2	9·5
	Ocean	1	1	2	12·5
	Penelope	—	—	—	—
		3	1	4	10·2
First Rate	Victoria	1	-	1	8·3
Second Rate	Princess Royal	2	1	3	30·
Fourth Rate	Bristol	—	—	—	—
	Galatea	3	1	4	7·6
	Liverpool	—	—	—	—
	Phœbe	—	—	—	—
	Sutlej	-	1	1	25·
		3	2	5	5·
Fifth Rate	Terrible	—	—	—	—
Sixth Rate	Blanche	-	1	1	11·7
	Clio	—	—	—	—
	Danae	—	—	—	—
	Eclipse	—	—	—	—
	Esk	—	—	—	—
	Juno	1	-	1	33·3
	Pelorus	1	-	1	10·

APPENDIX—IRREGULAR FORCE—Table III.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Sixth Rate—*continued.*	Pylades	2	—	2	12·1
	Rattlesnake	1	—	1	13·3
	Scylla	—	—	—	—
	Valorous	1	—	1	20·
	Wasp	1	—	1	18·1
		7	1	8	10·2
Sloop	Alert	2	—	2	26·6
	Cameleon	—	—	—	—
	Columbine	—	—	—	—
	Daphne	—	1	1	25·
	Lyra	—	—	—	—
	Nymphe	—	—	—	—
	Rapid	—	—	—	—
	Rosario	1	—	1	33·3
	Royalist	—	—	—	—
	Salamander	1	1	2	40·
	Shearwater	—	—	—	—
	Virago	—	1	1	18·1
		4	3	7	13·3
Gun Vessel	Avon	—	—	—	—
	Beacon	—	1	1	33·3
	Cygnet	—	—	—	—
	Dwarf	—	—	—	—
	Gnat	—	—	—	—
	Jaseur	—	—	—	—
	Lee	—	—	—	—
	Myrmidon	—	—	—	—
	Pandora	—	—	—	—
	Philomel	—	—	—	—
	Plover	1	—	1	50·
	Snipe	—	—	—	—
	Speedwell	—	—	—	—
		1	1	2	10·2
Steam Vessel	Hydra	1	—	1	20·
	Newport	—	—	—	—
		1	—	1	15·3

APPENDIX—IRREGULAR FORCE—Table III.—*continued.*

Rate, &c.	NAMES OF SHIPS.	Number of Deaths			Ratio per 1,000 of Force.
		From Disease.	From Injury.	TOTAL.	
Troop Ship -	Crocodile - -	1	- -	1	4·
	Himalaya - -	2	- -	2	9·3
	Jumna - - -	1	- -	1	18·1
	Malabar - - -	—	—	—	—
	Orontes - - -	—	—	—	—
	Serapis - - -	1	- -	1	4·
	Simoom - - -	2	- -	2	9·7
	Tamar - - -	2	1	3	13·
	Urgent - - -	5	1	6	40·
		14	2	16	10·5
Store Ship -	Hesper - - -	1	- -	1	66·6
	Industry - - -	—	—	—	—
	Megæra - - -	1	- -	1	6·
	Supply - - -	—	—	—	—
		2	- -	2	7·2
Hospital Ship (China).	Meeanee - - -	—	—	—	—
Ship (lent to Colonial Government at Melbourne).	Nelson - - -	- -	1	1	9·5
		- -	1	1	5·2
	TOTAL - - -	38	12	50	9·1
	Average Ratio for Twelve Years - - - -				10·2

APPENDIX—IRREGULAR FORCE—*continued.*

TABLE IV.

SHOWING the Number and Nature of the Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad	Ocean	1	Drowned; washed overboard from main chains during a gale.
Second Rate	Princess Royal	1	Drowned; fell overboard.
Fourth Rate	Galatea	1	Died from the effects of submersion.
	Sutlej	1	Fractured skull; fell from aloft.
Sixth Rate	Blanche	1	Multiple injury; fell from aloft.
Sloop	Daphne	1	Fractured skull; struck by a bag of coal.
	Salamander	1	Drowned; fell overboard.
	Virago	1	Drowned; fell overboard.
Gun Vessel	Beacon	1	Drowned; boat swamped.
Troop Ship	Tamar	1	Drowned; fell into steam basin.
	Urgent	1	Drowned; fell overboard.
	Nelson	1	Fractured skull; fell from aloft.
	TOTAL	12	

TABLE V.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Number of Deaths			Ratio per 1,000 of Force.
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Iron-clad - - -	390	739	1894·8	16	41·	3	1	4	10·2
First Rate - - -	120	109	908·3	6	50·	1	- -	1	8·3
Second Rate - - -	100	53	530·	10	100·	2	1	3	30·
Fourth Rate - - -	990	806	814·1	10	10·1	3	2	5	5·
Fifth Rate - - -	315	459	1457·1	11	34·9	—	—	—	—
Sixth Rate - - -	780	1,026	1315·3	18	23·	7	1	8	10·2
Sloop - - - -	525	938	1786·6	10	19·	4	3	7	13·3
Gun Vessel - - -	195	348	1784·6	4	20·5	1	1	2	10·2
Steam Vessel - - -	65	75	1153·8	3	46·1	1	- -	1	15·3
Troop Ship - - -	1,520	2,284	1502·6	48	31·5	14	2	16	10·5
Store Ship - - -	275	305	1109·	6	21·8	2	- -	2	7·2
Crews Navigating Meeanee and Nelson - - -	190	321	1689·4	- -	- -	- -	1	1	5·2
TOTAL - - -	5,465	7,463	1365·5	142	25·9	38	12	50	9·1
Average Ratios for Twelve Years - - -		1568·9		- -	24·4	- -	- -	- -	10·2

APPENDIX—IRREGULAR FORCE—*continued.*

TABLE VI.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	10,000	13,830	1383·	136	13·6	78	27	105	10·5
1857 - -	7,490	10,879	1454·4	227	30·3	72	29	101	13·5
1858 - -	4,260	6,077	1426·5	68	16·	32	24	56	13·2
1859 - -	6,060	10,193	1682·	147	24·3	46	18	64	10·5
1860 - -	6,430	9,940	1545·9	168	26·2	41	21	62	9·6
1861 - -	3,730	6,396	1714·7	99	26·5	21	18	39	10·4
1862 - -	5,960	10,645	1786·	206	34·5	38	19	57	9·5
1863 - -	3,810	6,925	1817·5	104	27·2	22	8	30	7·8
1864–5 -	2,690	4,556	1693·6	61	22·6	10	5	15	5·5
1865–6 -	3,760	6,501	1728·9	111	29·5	17	6	23	6·1
1866–7 -	5,060	8,127	1606·1	115	22·7	42	21	63	12·4
1867–8 -	5,465	7,463	1365·5	142	25·9	38	12	50	9·1
TOTAL - -	64,715	101,532	1568·9	1,584	24·4	457	208	665	10·2

TOTAL FORCE.

TABLE I.

SHOWING the Average Force corrected for Time, the Number of Cases of Disease and Injury, the Number Invalided and Dead, with the Ratio per 1,000 of Force on the different Stations.

STATIONS.	Average Force corrected for Time.	Cases of Disease and Injury.		Invalided.		Deaths			Ratio per 1,000 of Force
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	
Home	22,390	19,474	869·7	477	21·3	150	42	192	8·5
Mediterranean	3,810	5,270	1383·2	106	27·8	28	10	38	9·9
North America and West Indies	{* 4,760 / † 4,900}	7,364	1547·	204	41·6	34	12	46	9·3
South East Coast of America	1,040	1,639	1575·9	27	25·9	17	3	20	19·2
Pacific	{* 2,450 / † 2,490}	4,451	1816·7	111	44·5	17	11	28	11·2
West Coast of Africa	1,860	3,670	1972·5	161	86·5	30	8	38	20·4
East Indies and Cape of Good Hope	3,170	6,470	2041·	247	77·9	32	15	47	14·8
China	4,100	7,479	1824·1	254	61·9	67	22	89	21·7
Australia	1,115	1,717	1539·9	19	17·	7	3	10	8·9
Irregular	5,465	7,463	1365·5	142	25·9	38	12	50	9·1
TOTAL	{*50,160 / †50,340}	64,997	1295·7	1,748	34·7	420	138	558	11·
Average Ratios for Twelve Years			1439·9	–	34·6	– 0	–	–	14·7

* For Cases. † For Invalidings and Deaths.

APPENDIX—TOTAL FORCE—*continued.*

TABLE II.

SHOWING the Ratio per 1,000 of Force of the Number of Cases of Disease and Injury,

RATES.	Home.			Mediterranean.			North America and West Indies.			South East Coast of America.			Pacific.			West Coast of Africa.			Irregular.		Totals for each Class.		
	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.
Iron-clad	1215·8	19·1	5·8	1519·7	27·5	10·5	1339·7	48·2	8·6	–	–	–	1196·	29·4	5·8	–	–	–	41·	16·2	1340·8	25·9	7·
First Rate	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	50·	8·2	908·3	50·	8·
Second Rate	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	100·	30·	2065·8	85·8	17·
Third Rate	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fourth Rate	1816·6	45·2	14·2	1262·2	30·6	11·2	1458·3	42·	7·5	1468·5	26·6	24·7	1813·3	35·5	2·2	2100·	70·9	12·9	10·1	5·	1450·	30·6	10·
Fifth Rate	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	34·9	–	1457·1	34·9	–
Sixth Rate	1505·	15·	–	–	–	–	1675·7	28·2	12·4	–	–	–	2082·	58·2	20·3	1514·2	47·6	23·8	23·	10·2	1541·	32·1	14·4
Sloop	–	–	–	977·4	38·7	9·4	1609·5	44·4	7·4	2066·6	20·6	13·3	2176·3	53·5	6·2	2129·4	108·8	29·4	10·	13·2	1940·4	53·5	14·4
Gun Vessel	–	–	–	–	–	–	1650·	33·	–	–	–	–	1737·5	25·	–	2091·6	58·3	6·6	20·5	10·2	2227·7	52·9	11·8
Steam Vessel	959·9	11·2	13·2	1240·1	39·7	15·3	–	–	–	1661·5	30·7	25·6	–	–	–	1420·6	166·6	53·2	40·1	15·3	1230·3	49·8	21·3
Gunboat	1650·	50·	–	2005·5	11·1	11·1	1566·6	5·9	11·7	1243·4	17·3	8·6	–	–	75·	25·	–	–	–	–	1381·3	30·4	18·2
Stationary Ship	679·8	21·8	10·1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	679·8	21·8	10·1
Drill Ship	748·3	9·4	12·9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	748·3	9·4	12·9
Coast Guard Ship	883·7	19·7	11·2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	883·7	19·7	11·2
Training Ship	718·9	20·6	6·3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	718·9	20·6	6·3
Yacht	683·3	8·3	4·1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	683·3	8·3	4·1
Troop Ship	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	31·5	10·5	1702·7	54·7	11·7
Store Ship	1650·	20·	30·	–	–	–	–	–	–	–	–	–	1133·3	44·4	22·	1624·	128·	28·	21·8	7·2	1294·	62·6	19·4
Floating Battery (and Dock-yard)	–	–	–	–	–	–	1716·6	91·6	25·	–	–	–	–	–	–	–	–	–	–	–	1716·6	91·6	25·
Marine Detachment	–	–	–	–	–	–	–	–	–	400·	–	–	966·6	–	16·6	–	–	–	–	–	833·3	–	11·7
Training Brig	1088·6	9·2	9·2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1088·6	9·2	9·2
Receiving Ship	–	–	–	833·3	13·9	–	2222·2	55·4	13·3	2163·6	27·2	–	–	–	–	–	–	–	–	–	1777·1	66·2	16·8
Surveying Vessel	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1787·5	75·	25·
TOTAL	869·7	21·3	8·5	1383·2	37·8	9·9	1547·	41·6	9·3	1575·9	23·9	19·2	1816·7	44·5	11·2	1977·5	66·5	20·4	23·9	9·4	1295·7	54·7	11·

APPENDIX—TOTAL FORCE—*continued.*

TABLE II.

of the Number Invalided, and the Number Dead, in the different Classes of Ships.

West Coast of Africa.			East Indies and Cape of Good Hope.			China.			Australia.			Irregular.			Totals for each Class.		
Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.
-	-	-	-	-	-	1425·5	29·7	10·6	-	-	-	1894·8	41·	10·2	1340·8	25·9	7·6
-	-	-	-	-	-	-	-	-	-	-	-	908·3	50·	8·3	908·3	50·	8·3
-	-	-	-	-	-	2270·6	84·	16·	-	-	-	530·	100·	30·	2065·8	85·8	17·6
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2100·	70·9	12·9	2066·6	99·	13·3	-	-	-	-	-	-	814·1	10·1	5·	1459·	39·6	10·1
-	-	-	-	-	-	-	-	-	-	-	-	1457·1	34·9	-	1457·1	34·9	—
1514·2	47·6	23·8	1455·	41·9	16·7	1229·7	19·1	14·8	1447·5	22·5	10·	1315·3	23·	10·2	1541·	32·1	14·4
2429·4	108·8	29·4	2326·9	82·6	14·3	2029·7	59·4	26·7	1790·3	3·2	6·4	1786·6	19·	13·3	1940·4	53·5	14·4
2091·6	58·3	6·6	3141·1	47·	15·6	2255·3	76·9	21·5	-	-	-	1784·6	20·5	10·2	2227·7	52·8	11·2
1426·6	166·6	53·3	769·2	15·3	-	1807·6	138·4	30·7	-	-	-	1153·8	46·1	15·3	1236·3	49·8	21·3
-	-	-	-	-	-	1125·	45·4	27·2	-	-	-	-	-	-	1381·3	30·4	18·2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	679·8	21·8	10·1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	748·3	6·4	12·9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	883·7	19·7	11·2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	718·9	26·8	6·3
-	-	-	2300·9	129·5	9·5	1642·4	30·3	30·3	-	-	-	-	-	-	683·3	8·3	4·1
1624·	128·	28·	-	-	-	-	-	-	-	-	-	1502·6	31·5	10·5	1702·7	54·7	11·7
-	-	-	-	-	-	-	-	-	-	-	-	1109·	21·8	7·2	1294·	62·6	19·4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1716·6	91·6	25·
-	-	-	-	-	-	-	-	-	800·	-	-	-	-	-	823·5	-	11·7
-	-	-	1292·3	76·9	38·4	2544·4	155·5	33·3	-	-	-	-	-	-	1088·6	2·2	2·2
-	-	-	-	-	-	1787·5	75·	25·	-	-	-	-	-	-	1777·1	66·2	10·8
												-	-	-	1787·5	75·	25·
1972·5	86·5	20·4	2041·	77·9	14·8	1824·1	61·9	21·7	1539·9	17·	8·9	1365·5	25·9	9·1	1295·7	34·7	11·

TABLE III.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratio per 1,000 of Force, for Twelve Years.

YEAR.	Average Force corrected for Time.	Number of Cases of Disease and Injury.	Ratio per 1,000 of Force.	Number Invalided.	Ratio per 1,000 of Force.	Number of Deaths			Ratio per 1,000 of Force.
						From Disease.	From Injury.	TOTAL.	
1856 - -	51,730	73,195	1414·9	* 998	* 19·3	629	172	801	15·5
1857 - -	42,470	66,546	1566·6	1,460	34·4	623	196	819	19·4
1858 - -	43,120	75,924	1763·9	1,763	40·9	873	242	1,115	25·5
1859 - -	52,825	81,325	1540·2	1,994	37·7	624	262	886	16·7
1860 - -	64,025	90,329	1410·8	2,844	44·4	712	226	938	14·7
1861 - -	62,485	91,276	1460·7	2,391	38·2	716	224	940	15·
1862 - -	58,870	88,661	1506·	1,944	33·	684	218	902	15·3
1863 - -	54,090	78,664	1454·3	1,903	35·1	414	205	619	11·4
1864–5 -	51,225	67,558	1318·8	1,792	34·9	444	270	714	13·9
1865–6 -	50,495	67,593	1338·6	1,590	31·4	404	131	535	10·5
1866–7 -	† 49,960 ‡ 50,275	63,188	1264·8	1,447	28·7	400	125	525	10·4
1867–8 -	† 50,160 ‡ 50,340	64,997	1295·7	1,748	34·7	420	138	558	11·
TOTAL - -	† 631,455 ‡ 631,950	909,256	1439·9	21,874	34·6	6,943	2,409	9,352	14·7

* Returns incomplete. † For Cases. ‡ For Invalidings and Deaths.

NAVY (HEALTH).

RETURN to an Order of the Honourable The House of Commons, dated 29 April 1870;—*for*,

A COPY

OF THE

STATISTICAL ABSTRACT

OF THE

HEALTH OF THE NAVY,

FOR THE YEAR 1869-70.

1 JULY 1869 to 30 JUNE 1870.

(*Lord John Hay.*)

Ordered, by The House of Commons, *to be Printed*, 29 *April* 1870.

TO THE RIGHT HONOURABLE

HUGH C. E. CHILDERS, M.P.

FIRST LORD OF THE ADMIRALTY,

&c. &c. &c.

Sir,

I HAVE the honour to lay before you the Statistical Abstract of the Health of the Navy for the period embraced between the 1st of July 1869, and the 30th of June 1870, inclusive.

I have the honour to be,

Sir,

Your most obedient Servant,

A. ARMSTRONG,

Director General.

To ALEXANDER ARMSTRONG, Esq., M.D., R.N.

&c. &c. &c.

DIRECTOR GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.

Sir,

I HAVE the honour to submit the Statistical Abstract of the Health of the Navy for the period embraced between the 1st of July 1869, and the 30th of June 1870, inclusive.

Compared with the preceding twelve months, there was an increase in the various ratios of cases entered on the sick-list, of invaliding, and of deaths. In the two former ratios the increase was trifling, but that in the death rate was comparatively high, and was altogether occasioned by the prevalence of yellow fever in the West Indies, and South East Coast of America Stations, and by the loss of the Gunboat Slaney in China.

On the Home Station an outbreak of small-pox, and subsequently of scarlatina, occurred in the Britannia, the training ship for cadets, stationed at Dartmouth, but happily neither form of disease caused any mortality.

On the North America and West Indies, and in the South East Coast of America Stations, yellow fever prevailed epidemically, and caused much mortality. Fifty-one deaths from that fatal form of fever occurred in the squadron on the former station, and ten on the latter.

The system of transferring the vessels employed on the West Coast of Africa to other stations, after a comparatively brief period of service, continues to be attended with good results. During the period embraced in this Abstract the mortality on that station was the lowest on record.

On the China Station a great increase to the death-rate was occasioned by the loss of the Slaney, whereby thirty-four persons were drowned.

In the beginning of July 1869 the Flying Squadron reached Madeira on its outward voyage from England, and at the termination of the Midsummer Quarter of 1870 it was in the Pacific Ocean on its passage from Honolulu in the Sandwich Islands to Valparaiso. Considering the length of time the vessels comprising the squadron were at sea, the prolonged use of salt provisions to which the crews were consequently subjected, and the varieties of climate through which they passed, the squadron, as a force, was remarkably healthy, as will be observed by referring to the remarks made in connection with it in the Report on the Irregular Force.

Had there been no mortality from yellow fever during the period embraced in this Report, and had the shipwreck of the Slaney not occurred, the total death-rate would have been 8·3 per 1,000 of force, which is precisely the ratio of mortality of the preceding twelve months, when it was the lowest on record.

I have the honour to be,

Sir,

Your most obedient Servant,

ALEX. E. MACKAY, M.D., R.N.,

Deputy Inspector General of Hospitals and Fleets.

Admiralty, Somerset House,
1 March 1871.

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NOTE.

The terms "ratio of sickness" and "sick-rate" in the following Abstract are to be understood as referring only to the ratio of cases placed on the sick-list, and not to the loss of service, or number of days' sickness occasioned by them.

HOME STATION.

Sick-Rate.

Average Ratio of Cases placed on the Sick-List for a period of Fourteen Years, 1017·3 per 1,000.

Home Station.

During the period embraced in the present Report sixty-five vessels were employed on the Home Station, of which ten iron-clads, comprising the Channel Fleet and one vessel of the sixth-rate, were alone employed on duties analogous to those of vessels of war on active service. The remainder were variously employed as what are termed stationary ships, drill ships, coastguard ships, training ships, sloops, steam-vessels, yachts, gun-vessels, gunboats, store ships, and training brigs. The mean force corrected for time was 21,080, and the total number of cases of disease and injury entered on the sick-list 18,894, which is in the ratio of 896·2 per 1,000 of force, being a slight increase compared with the preceding twelve months, but a reduction compared with the average of the station taken for fourteen years, equal to 121·1 per 1,000.

IRONCLADS.

Ten iron clad vessels were employed in the Channel Squadron. Compared with the preceding twelve months the ratios of cases and of mortality in this class of vessels show a fractional increase, and there is also a slight increase in the invaliding rate. The vessels showing the highest ratios of cases were the Captain, the Scorpion, the Volage, and the Warrior. Of these the Captain and the Volage were newly commissioned vessels.

The Captain was commissioned on the 30th of April 1870, so that her returns only extend over a period of two months,

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Home Station.

during which time she was at Portsmouth and Plymouth. Rheumatism was rather prevalent on board, but, as might have been expected during the period of fitting out, injuries of more or less importance formed the majority of cases which came under treatment.

The returns from the Scorpion are from the 1st of July to the 31st of December 1869, during the greater part of which time she was employed at Queenstown, whence she was transferred to Bermuda. There was little or no sickness of any moment among the ship's company, the affections of most importance, numerically, being catarrh, abscesses, and more or less trifling injuries.

In the Volage rheumatism was very prevalent during the Midsummer quarter of 1870, as were catarrhal affections, boils and abscesses, and such casualties as are incidental to vessels fitting out.

The returns from the Warrior are for the whole twelve months, during which time she was employed in the Channel, and at Lisbon, Madeira, and Gibraltar. Ephemeral fever and rheumatism were somewhat frequent on board; and in the Christmas quarter of 1869, and the Lady quarter of 1870, catarrhal affections prevailed almost epidemically. During the Michaelmas quarter of 1869, and the Lady quarter of 1870, when the vessel was cruising in the Atlantic, boils and abscesses were very prevalent amongst the ship's company. Upon the whole there was very little disease of any importance in the Warrior during the twelve months.

SIXTH RATE.

During the four months for which the returns of the Valorous are rendered, the vessel was much employed on the coasts of England and Ireland. One or two somewhat severe cases of rheumatism occurred on board consequent on the rough weather and exposure to which the ship's company were subjected, and which also occasioned a large number of cases of ordinary catarrh. With these exceptions there was nothing in the returns from this vessel calling for comment.

In the majority of the other vessels of the force on the Home station the average ratios of cases entered on the sick-list were considerably below the average ratio of the station taken for a period of fourteen years. There was indeed very little sickness of any moment amongst the different classes of vessels, with the exception of that class (the training ships) which is set apart for the education of naval cadets and boys, and

and which, as has been previously observed in these Reports, are, like all other scholastic establishments where large numbers of boys are brought together, liable to be visited by occasional outbreaks of infectious disease. Home Station.

In the Boscawen at Portland, there were eight cases of scarlet fever and seven of measles in the first six months of 1870. In the Ganges at Falmouth, there were two cases of enteric fever; in the Implacable at Plymouth, during the Lady quarter of 1870, there were two cases of scarlet fever; and in the Impregnable, also at Plymouth, there were in the Michaelmas quarter of 1869, eight cases of measles; in the Lady quarter of 1870, one case of measles and twenty-one of scarlet fever, and in the Midsummer, two cases of the latter disease. TRAINING SHIPS.

It was, however, in the Britannia, the training ship of naval cadets, stationed at Dartmouth, that the most formidable epidemics of infectious disease occurred. In November 1869, three cases of measles of a slight character had been placed on the sick-list. They were immediately removed to sick quarters on shore, and every precaution was taken to prevent the spread of the disease amongst the cadets, and with evident success, for no other cases occurred. On the 4th of February 1870, however, three days after the assembly of the cadets for the Easter term of instruction, a case of small-pox occurred in the person of a cadet. It appears that the eruption, in scanty amount, was actually upon him when he joined the ship, but that not feeling in any way unwell, he had thought nothing of it, and mingled at once with the other cadets. On its being discovered, he was at once removed to sick quarters on shore, and every means taken to check any spread of the disease. After an interval of twelve days, another case occurred, on the following day two more, next day five, and the disease continued to present itself until the 12th of February, when it appears to have exhausted itself, thirteen cases altogether having occurred. All the young gentlemen presented distinct marks of vaccination; and in every case the disease was extremely modified thereby. Meanwhile, however, another and very formidable variety of eruptive fever had found its way on board, scarlatina having presented itself on the 19th of February, in the person of a cadet who had returned from leave on the 8th of that month, having been detained by what was described in his medical certificate as an attack of influenza, complicated with sore throat. On rejoining the ship he appeared to be perfectly well,

Home Station.

well, and remained so until the evening of the 19th, when he was attacked with febrile symptoms; but the characteristic symptoms of scarlet fever did not appear until the 22nd, when he was at once transferred to sick quarters on shore. From that date until the 28th of March, when the last case occurred, the disease spread rapidly, fifty-seven cases in all having appeared, of which fifty-five were in the persons of naval cadets, and two in men belonging to the ship's company. One of these was a servant who had been in close attendance on two sick cadets; the other a young seaman, one of the crew of the boat employed in conveying sick to hospital. Happily in the great majority of the cases, the disease presented itself in a very mild form. As frequently occurs in epidemics of this disease, cases of sore throat were not uncommon; they were looked upon with great suspicion, and at once removed from the ship, as being probably occasioned by the scarlet fever poison.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 25·1 per 1,000.

During the period embraced in this Abstract the total number of persons invalided on the Home Station was 557, which is in the ratio of 26·4 per 1,000 of mean force, being an increase compared with the preceding twelve months equal to 3·7 per 1,000. It is also slightly above the average ratio of invaliding on the station taken for a period of fourteen years.

Of those invalided, two were for the sequelæ of fever; fifty-two for diseases of the brain and nervous system; 100 for diseases of the respiratory organs; 109 for diseases of the heart and blood-vessels; ten for diseases of the alimentary canal; three for diseases of the liver and spleen; forty-one for diseases of the genito-urinary organs; fifty-five for rheumatism and diseases of the bones and joints; twenty-nine for diseases of the special senses; twenty-six for diseases of the skin and cellular tissue; thirty-two for dyspepsia and debility; and ninety-eight for wounds and injuries of various kinds.

DEATHS.

Home Station.

Average Ratio of Mortality for Fourteen Years, 8·3 per 1,000.

One hundred and forty-eight deaths occurred on the Home Station during this period, 120 being from various forms of disease, and twenty-eight from wounds and injuries and drowning. This gives a ratio of 7· per 1,000 of force, which is an increase to the extent of ·5 compared with the preceding twelve months, but is still considerably below the average death-rate of the station.

Of the deaths from disease, twelve were occasioned by different forms of fever; fourteen by diseases of the brain and nervous system; fifty-six by diseases of the organs of respiration; twenty-five by diseases of the heart and blood-vessels; four by diseases of the alimentary canal; two by diseases of the liver; four by diseases of the genito-urinary organs; and three by diseases of the skin and cellular tissue.

The nature of the fatal casualties will be found by referring to Table II. of the Appendix to this station.

MEDITERRANEAN STATION.

Sick Rate.

Average Ratio of Cases placed on the Sick-list for Fourteen Years, 1458·5 per 1,000.

Mediterranean Station.

The Mediterranean squadron during the period of this Abstract comprised seventeen vessels; viz., six iron-clads; two sloops; three steam-vessels; two gun-vessels; three gun-boats; and one receiving ship, permanently stationed in Malta Harbour. The mean force, corrected for time, was 4,120, and the total number of cases of disease and injury entered on the sick-list 5,671, which is in the ratio of 1376·4 per 1,000, being a trifling increase, compared with the preceding twelve months.

IRON CLADS.

Compared with the preceding year, there was a reduction in the ratio of cases entered on the sick-list in this class of vessel equal to 159· per 1,000. This is the more gratifying, inasmuch as during the preceding period there had been a reduction equal to 97·5 per 1,000, compared with the year 1867–68, although a large amount of sickness was occasioned by an extensive epidemic in the Caledonia, as referred to in the Statistical Abstract for 1868–69. With the exception of the Bellerophon, all the vessels of this class were on this station during the whole twelve months, and their sick-rates varied from 2162·6 per 1,000, which obtained in the Caledonia, to 874·4 per 1,000, which was the ratio of cases entered on the sick-list of the Prince Consort.

Taken in their alphabetical order, it may be observed that the returns from the Bellerophon are only for nine months, during which time she was employed variously on different parts of the station. The ship's company appear to have enjoyed a fair measure of health, the daily number on the sick-list averaging about three per cent. of the complement.

Diarrhœa

Diarrhœa was somewhat frequent in the Christmas quarter of 1869, and in the Lady and Midsummer quarters of 1870 there were a good many cases of simple continued fever of a mild character. With these exceptions, there was nothing worthy of comment in connection with this vessel. Mediterranean Station.

As during the preceding twelve months, the highest ratio of cases entered on the sick-list in the iron-clad vessels was in the Caledonia, in which it was as high as 2162·6 per 1,000. This high ratio was almost altogether attributable to the continuance, during the Michaelmas quarter of 1869, of the extensive epidemic which prevailed in the Midsummer quarter. From the 1st of July to the end of August, when the epidemic ceased, no fewer than sixty-eight cases of simple continued fever were entered on the sick-list, and during the same quarter twenty-eight cases of remittent fever. In the three subsequent quarters of the period embraced in this Abstract, the ship's company was comparatively free from these affections. Dyspepsia and diarrhœa formed, however, large items in her returns, and the great prevalence of boils and abscesses amongst the crew showed their physical deterioration. This, in the lapse of time, however, appears to have been overcome, and during the Midsummer quarter of 1870 the general health of the men was reported to have been good.

The Enterprise, during the twelve months, was almost altogether employed on the coasts of Spain and Portugal. There was very little sickness among her ship's company, and there is nothing of a noteworthy character in her returns.

The Lord Warden, the flagship of the Mediterranean Squadron, was a good deal at sea during the period of this Abstract, her cruising extending to almost every part of the station. Rheumatism appears to have been rather prevalent amongst the ship's company, and there were a good many cases of catarrh; but the affections of greatest numerical importance were boils and abscesses, and injuries of more or less severity. There was very little disease indeed, of any importance, on board.

The Prince Consort shows the smallest ratio of cases entered on the sick-list. During the Lady quarter of 1870, a good many cases of rheumatism and of ordinary sore-throat were placed under treatment, but for the most part they were not severe. With these exceptions, the returns from this vessel present no features of interest.

Mediterranean Station.

The Royal Oak also shows a small sick-rate. During the Michaelmas quarter of 1869, there were a good many cases of rheumatism, dyspepsia, and diarrhœa; but they did not subsequently prevail to any extent. The greatest loss of service during the twelve months was occasioned by boils and abscesses, ulcers, and more or less trivial casualties. With the exception of three cases of measles and two of typhus fever, there is nothing of particular moment in the returns from this vessel.

LOOPS.

In the Cruiser, which was chiefly employed on the Spanish and Portuguese coasts, the sick-rate was not high. One case of enteric fever, however, occurred amongst the ship's company, and during the Lady and Midsummer quarters of 1870 a good many cases of what is termed simple continued fever, which appear to have been of some severity, as a large proportion of them required to be sent to hospital, and two of them proved fatal. With these exceptions the crew of this vessel appear to have enjoyed a fair measure of health.

The Rapid was much employed during the twelve months in the Greek Archipelago, and off the coasts of Asia Minor and of Syria. Her sick-list was high, averaging about 6 per cent. of the ship's company. The most important affection, in point of prevalence, was simple continued fever, of which a considerable number of cases presented themselves, particularly during the Midsummer quarter of 1870. The disease presented itself in a mild form.

There was very little sickness of any importance in the remaining vessels of the squadron. One or two cases of enteric fever occurred in the Newport, a surveying vessel, employed on the coast of Sicily, and subsequently at Port Said, and in the Suez Canal; and in the Cockatrice, stationed in the Danube, malarial fevers were prevalent. The Jaseur, which shows the highest ratio of cases entered on the sick-list of any vessel of the squadron, was only nine months on the station, during which time she was employed on the Spanish coast, among the Ionian Islands, and in Greece. Ephemeral fevers, rheumatism, and catarrhs were the most common affections on board; otherwise there appears to have been very little disease of any importance on the sick-list.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 39· per 1,000.

The total number of persons invalided on the station during the twelve months was 153, which is in the ratio of 37·1 per 1,000 of force, being an increase, compared with the preceding year, equal to 4·7 per 1,000.

Of the total number invalided, eighteen were for the sequelæ of fever; six for diseases of the brain and nervous system; thirty-six for diseases of the respiratory organs; eleven for diseases of the heart and blood-vessels; seven for diseases of the alimentary canal; three for diseases of the liver; twelve for diseases of the genito-urinary organs; twenty-three for rheumatism and diseases of the bones and joints; two for diseases of the special senses; six for diseases of the skin and cellular tissue; twenty-three for dyspepsia and debility; and six for wounds and injuries of various kinds.

Deaths.

Average Ratio of Mortality for Fourteen Years, 9·9 per 1,000.

The total number of deaths in the squadron during the twelve months was twenty-nine, of which twenty-one were from various forms of disease, and eight from wounds and injuries, and drowning. The total death-rate was 7· per 1,000, which is ·6 below the death-rate of the preceding year.

Of the deaths from disease, four were from fever, chiefly enteric; seven from diseases of the brain and nervous system; five from diseases of the respiratory organs; three from diseases of the heart and blood-vessels; and two from diseases of the alimentary canal.

The details in connection with the deaths from violence will be found on referring to Table II. of the Appendix to this station.

NORTH AMERICA AND WEST INDIES STATION.

Sick-Rate.

Average Ratio of Cases placed on the Sick-List for Fourteen Years, 1574·5 per 1,000.

North America and West Indies Station.

The squadron on the North America and West Indies Station, during the period embraced in this Abstract, comprised nineteen vessels, which, however, from the circumstance of two of them having been twice, in separate commissions, on the station during the twelve months, represent twenty-one vessels. Of these, four were iron-clads; six were vessels of the sixth rate; there were four sloops; five gun-vessels; one receiving ship, permanently stationed at Port Royal, Jamaica; and one floating battery, permanently stationed at Bermuda: besides these, there were five gun-boats, the returns from which are defective. The total force, corrected for time, was 3,500; but in estimating the ratio of cases entered on the sick-list it is necessary to make a deduction from that number to the extent of 120, being the equivalent of the crews of the gun-boats from which returns were defective, and no reliable data as regards cases entered on the sick-list were obtained. The total force, however, is taken in estimating the invaliding and death rates, the necessary returns under these heads being complete. The total number of cases entered on the sick-list was 5,271, which is in the ratio of 1559·4 per 1,000, being an increase, compared with the preceding twelve months, equal to 243· per 1,000.

IRONCLADS.

There is a slight increase in the ratio of cases entered on the sick-list in this class of vessels compared with the preceding year, altogether owing to the prevalence of epidemic disease in one vessel, the Defence.

In

North America and West Indies Station.

In the commencement of the Michaelmas quarter of 1869, the Defence was at Havana, where, having contracted yellow fever, she proceeded to sea for a few days, and then returned to the same anchorage, when numerous cases of yellow fever and other forms of febrile disease occurred. From thence she proceeded to Santiago, in Cuba, and afterwards to Port Royal, Jamaica, where she remained until the 10th of August, when, on account of the persistence of the yellow fever, she left for Halifax, arriving there on the 9th of September. During this quarter twenty-five cases of yellow fever occurred, and during the following, three cases; of the whole number, seventeen cases proving fatal. It appears that, unhappily, the repairs required by the vessel were of such a nature as forbade her proceeding to a northern latitude at an earlier period. With the exception of that fatal epidemic, there was little of importance in the Medical Returns from this vessel. Boils and abscesses, however, appear to have been exceedingly prevalent amongst the ship's company.

The return from the Favorite is only for about two months, during which time she was at Halifax, and subsequently on her passage to England to be paid off. The ship's company appear to have been remarkably healthy, and there is nothing in her return to call for remark.

The Royal Alfred was paid off at Halifax on the 31st of August, and re-commissioned on the following day by a crew of officers and men sent out from England in the Revenge, the old crew returning to England in that vessel. During the two concluding months of the first commission the ship's company appear to have enjoyed excellent health. During the remainder of the twelve months the new crew appear to have been also very healthy upon the whole. Catarrhal and rheumatic affections were rather prevalent, and in the Lady quarter of 1870, at Port Royal, Jamaica, a good many cases of febrile disease occurred, and amongst them five of what are classed as yellow fever. It is stated, however, that there being specific yellow fever is open to doubt, as the only grounds for classing them under this head were their severity, and the fact that yellow fever was prevailing in the Aboukir and on shore. None of the cases proved fatal.

SIXTH RATE.

There is a decrease in the ratio of cases entered upon the sick-list in this class of vessel compared with the preceding twelve months.

North America and West Indies Station.

The returns from the Danae are for the first six months of 1870, during which period she was altogether employed in the West Indies. The health of the ship's company during this period appears to have been very good, and they enjoyed a comparative immunity from febrile diseases. In the Midsummer quarter a good deal of loss of service was occasioned by the prevalence of boils, chiefly among the boys and young ordinary seamen.

The only feature of interest in the medical history of the Eclipse was an outbreak of yellow fever, the disease being contracted while the vessel was lying at Havana, where it was prevailing on shore. Nine cases altogether occurred, of which, happily, one only proved fatal. The vessel was at once despatched to Halifax, to which wise proceeding it may be attributed that the fever did not spread further or prove more fatal. With the exception of this outbreak, the ship's company were remarkably healthy.

During the nine months over which the returns from the Jason extend, she was altogether employed in the West Indies, where her crew appear to have enjoyed excellent health. The ratio of cases entered on her sick-list was almost the same as that of the Eclipse, both vessels showing the lowest ratios of their class. There was, in fact, no disease of any importance in the Jason.

The Racoon was paid off at Bermuda on the 6th of May 1870, and re-commissioned with a new ship's company on the following day. Her returns extend from the 1st of January to the 30th of June. From the beginning of the year until she was paid off, the old ship's company enjoyed a fair measure of health, boils and abscesses being the most prevalent affections. During the latter half of the Midsummer quarter, however, there was a good deal of sickness amongst the new ship's company, diarrhœa being epidemic during the month of June. The affection was supposed to be due to the use of rain water, but no doubt much of it was owing to the high and unaccustomed temperature to which the men were exposed, and to the fatigue incurred in fitting out the ship. Boils and abscesses, ulcers, and more or less trifling casualties, also tended much to swell the sick-list, and to cause considerable loss of service, but with the exception of three cases of dysentery, there was no sickness of any gravity on board.

The return from the Valorous is for the Midsummer quarter of 1870, when she was at Bermuda and Halifax.

Considering

Considering that she was a newly commissioned ship, she was remarkably healthy; and with the exception of a few cases of diarrhœa, and the affections which ordinarily prevail in newly commissioned vessels, there is nothing noteworthy in her returns.

North America and West Indies Station.

SLOOPS.

On the 1st of July 1869, the Barracouta sailed fron Havana for Bermuda, touching at Port Royal, Jamaica; on the following day yellow fever made its appearance on board. Six cases appear in the returns for the Michaelmas quarter classed under that head, but there were at the same time several cases of a milder form of fever, which may have been modifications of the more fatal type. Of the six cases noted as yellow fever, four proved fatal. After the arrival of the vessel at Bermuda, a fresh case of this formidable disease having presented itself, the local authorities insisted on the vessel leaving the island, which she did at once, starting for Halifax, and re-embarking the patients she had landed at the Quarantine Station in Bermuda. After this no fresh case of the disease occurred. This outbreak of fever is the only point calling for comment in the returns from the Barracouta, the crew of which were otherwise very healthy.

With the exception of a few cases of fever, one of which is classed as enteric in the Niobe, there was no sickness of any importance in that vessel or in the Royalist.

The Vestal suffered severely from yellow fever. Seven cases only appear in her returns under that head, but of these, five proved fatal. Twenty-one cases, however, of what are termed simple continued fever, occurred during the time the more fatal form of fever was prevailing, and it is probable that some at least of these were modifications of the more malignant disease.

The remaining vessels of the squadron in which fatal cases of yellow fever occurred, were the Aboukir, the Lapwing, the Philomel, and the Terror. In the former vessel febrile disease prevailed epidemically for nearly nine months. In the Michaelmas quarter of 1869, there were 145 cases of continued fever and two of yellow fever; in the Christmas quarter forty-nine of continued fever, fifteen of yellow fever, and one of remittent fever; and in the Lady quarter of 1870, eighty-two of continued fever, eleven of yellow fever, and three of remittent fever. In the Midsummer quarter of 1870, there were only six cases of continued fever. Fifteen of the cases of yellow fever

 terminated

North America and West Indies Station.

terminated fatally. These were all, of course, treated in the Royal Naval Hospital at Port Royal.

In the Lapwing there were two cases of yellow fever. Of these, one, contracted at Nassau, where it was prevailing on shore, proved fatal. There were five fatal cases of yellow fever in the Philomel. The disease was contracted at Havanna. Seven cases of yellow fever appear in the returns from the ship; but febrile affections, classed under the head of continued and remittent fever, were very prevalent at the same time, and doubtless some of these were modified forms of the more fatal disease.

Two fatal cases occurred in the Terror at Bermuda. The disease was contracted in the wards of the Quarantine Hospital at Ports Island, Bermuda, the men having been residing there for twelve days subsequent to the occupation of the hospital by the Barracouta's yellow fever cases.

With the exception of the prevalence of yellow fever in so many of the vessels, the general health of the squadron on the North America and West Indies station was very good.

There were two deaths from yellow fever in the gunboats.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 29·2 per 1,000.

During the twelve months embraced in this Abstract, 120 persons were invalided for various forms of disease and injury, being in the ratio of 34·2 per 1,000 of mean force, which is an increase compared with the preceding twelve months equal to 7·9 per 1,000.

Ten persons were invalided for the sequelæ of fever; thirteen for diseases of the brain and nervous system; fourteen for diseases of the organs of respiration; twelve for diseases of the heart and bloodvessels; two for diseases of the alimentary canal; one for disease of the liver; twelve for diseases of the genito-urinary organs; eleven for rheumatism and disease of the bones and joints; six for diseases of the special

special senses; five for diseases of the skin and cellular tissue; nineteen for dyspepsia and debility; and fifteen for wounds and injuries of various kinds.

North America and West Indies Station.

Deaths.

Average Ratio of Mortality for Fourteen Years, 18·7 per 1,000.

There were eighty-one deaths on the station during the period, which is in the ratio of 23·1 per 1,000 of mean force, being an increase compared with the preceding twelve months equal to 14·6 per 1,000, an increase altogether attributable to the prevalence of yellow fever in the squadron. Of the total number of deaths fifty-one were occasioned by that virulent form of fever. The death-rate, as will be observed, is considerably above the average of the station taken for fourteen years.

Of the total number of deaths from disease fifty-seven were from fever, fifty-one of these, as has been already observed, being of the specific yellow fever type; one from apoplexy; six from diseases of the respiratory organs; one from disease of the heart; one from disease of the alimentary canal; two from diseases of the genito-urinary organs; and one from climatic cachexia.

The details in conection with the deaths from violence will be found on referring to Table II. of the Appendix to this station.

SOUTH EAST COAST OF AMERICA.

Sick-Rate.

Average Ratio of Cases placed on the Sick-List for Fourteen Years, 1648·1 per 1,000.

South East Coast of America Station.

The squadron on the south east coast of America, during the period of this Abstract, comprised six vessels; viz., one of the sixth-rate; one sloop; three gun-vessels; and one receiving ship, permanently stationed at Rio de Janeiro. There was also a small detachment of Marines stationed at the Falkland Islands. The total force, corrected for time, was 640, but 610 is taken as the force in computing the ratio of cases entered on the sick-list, the returns from one of the ships being defective. The total force, however, is taken in estimating the invaliding and death rates, the returns being complete as regards these particulars. The total number of cases entered on the sick-list was 656, which is in the ratio of 1075·4 per 1,000, being a reduction, compared with the preceding twelve months, equal to 504·2 per 1,000.

SIXTH RATE.

The returns from the Pylades, the only vessel of this class, are for nine months, during which time the general health of the ship's company may be said to have been most excellent. Her daily sick-list, in fact, averaged under 2 per cent. of her complement. Unfortunately, however, while at Rio de Janeiro, in the month of February 1870, yellow fever being prevalent on shore, three cases occurred in the Pylades, of which two proved fatal. At the same time six cases of what is termed remittent fever occurred. With these exceptions there was little or no sickness whatever in this vessel.

SLOOP.

The ship's company of the Racoon appear to have enjoyed a fair measure of health, the daily number on the sick-list averaging about 3·5 per cent. of her complement. The return from her is only for the Michaelmas quarter of 1869, during which time she lay almost altogether at Monte Video. Catarrhal and rheumatic affections were, numerically, the most important on her sick-list.

GUN VESSEL.

In the Beacon, which was for the most part employed on the southern division of the station, the most important affections

South East Coast of America Station.

affections were fevers of a malarial character, and especially ague, the result of service during the previous twelve months in the River Paraguay, where, as was noted in the Statistical Abstract for that period, the crew suffered much from those diseases. In the Lady quarter of 1870, the vessel then being at Rio de Janeiro, and in daily communication with the Egmont, on board which there were several cases of yellow fever, a stoker of the Beacon contracted the disease, and, being discharged to the Egmont for treatment as soon as the distinctive character of the fever became developed, died there on the third day. The Beacon at once proceeded to the southward, and happily no other cases occurred. There were no other points of interest in connection with the medical history of this vessel.

The Cracker shows the highest ratio of cases of any vessel on the station. During the Michaelmas quarter of 1869 she was employed in the River Paraguay, being stationed at Asuncion from the 6th of July to the 11th of September. During this time cases of rheumatism, fever, and diarrhœa were frequent, and it was while there that the large number of cases entered on the sick-list gave the high ratio which this vessel shows, as during the remainder of the twelve months there was very little sickness among the crew, and that for the most part of a trifling character.

The ratio of cases entered on the sick-list of the Speedwell was very low, the daily number under treatment averaging only 2·3 per cent. of her complement. There is nothing in her returns calling for comment.

The ratio of cases entered on the sick-list of the Egmont, the receiving ship permanently stationed at Rio de Janeiro, was higher than that of the preceding twelve months by 630·5 per 1,000. The most important disease which presented itself on board was yellow fever, the total number of cases of which it has been impossible to ascertain, her returns being defective; but as there were seven deaths from this cause, the probability is that there were about thirty cases altogether. The disease, as has previously been observed, was prevailing on shore during this period, and it was particularly prevalent amongst the merchant shipping in the harbour. It was at no time very prevalent in the Egmont, but cases occurred during every quarter of the twelve months. With this exception there is nothing in the returns of the Egmont calling for observation.

South East Coast of America Station.

MARINE DETACHMENT.

There was no sickness whatever of any importance amongst the men forming this Detachment.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 30·5 per 1,000.

Twenty-one persons were invalided from the squadron during the period of this Abstract, being in the ratio of 32·8 per 1,000 of mean force, which is an increase, compared with the preceding year, equal to 14·2 per 1,000.

One man was invalided for the sequelæ of fever: two for diseases of the brain and nervous system; five for diseases of the respiratory organs; one for dysentery; two for diseases of the genito-urinary organs; two for rheumatism; two for diseases of the special senses; and six for dyspepsia and debility.

Deaths.

Average Ratio of Mortality for Fourteen Years	-	22·1	per 1,000.
„ „ „	deducting for men lost in "Bombay"	16·6	„

There were twelve deaths in the squadron during the twelve months, being in the ratio of 18·7 per 1,000 of force, being an increase, compared with the preceding year, equal to 5·2 per 1,000.

There were ten deaths from disease, all occasioned by yellow fever. Of the remaining two deaths, one was consequent upon tetanus, resulting from a wound of the foot, caused by treading on a broken bottle. The cause of the other death has not been ascertained.

PACIFIC STATION.

Sick Rate.

Average Ratio of Cases placed on the Sick-List for Fourteen Years, 1558·1 per 1,000.

Pacific Station.

Eleven ships were employed on this station during the period, but as one of them was paid off and re-commissioned on the station with a new crew, they in fact represent twelve vessels; comprising, two ironclads; three vessels of the sixth-rate; three sloops; three gun-vessels, and one storeship stationed at Valparaiso.

There was also a detachment of Marines on the Island of San Juan de Fuca. The total force corrected for time was 2,050, but in consequence of defective returns from two vessels, 1,960 will be considered the force in estimating the ratio of cases entered on the sick-list, the total force being taken in calculating the invaliding and death rates.

The total number of cases entered on the sick-list was 2,825, which is in the ratio of 1411·3 per 1,000, being a slight reduction compared with the preceding year.

IRONCLAD.

The Zealous, the only vessel of this class, was paid off at Panama, in January 1870, and recommissioned by a fresh crew sent out from England in the Revenge. The ratio of cases entered on the sick-list during the twelve months was much in excess of that of the preceding year, and was mainly attributable to the large amount of syphilitic disease contracted by the old crew while the vessel was stationed at Valparaiso, and to the prevalence of ephemeral febrile attacks, and boils and abscesses amongst the new crew during the Lady quarter of 1870. During the Midsummer quarter of the year, when the vessel was stationed at Vancouver's Island, the ship's company appear to have enjoyed a very fair measure of

Pacific Station.

of health, the only affections of any prominence being catarrhs and sore-throat, attributable to the state of the weather which was very cold and raw considering the period of the year. At the end of the quarter the crew were reported to be in excellent health, being greatly invigorated by the bracing climate of Vancouver's compared with the depressing tropical heats to which they had been so recently exposed. The daily number sick of the old crew averaged 5·1 per cent. of their number; and of the new crew 4·7 per cent.

SIXTH RATE.

Compared with the preceding twelve months, there was a reduction in the ratio of cases entered on the sick-list in this class of vessel equal to 290·6 per 1,000.

During the Michaelmas quarter of 1869, the Charybdis was on her passage from Payta to Vancouver's Island, touching at Panama. Rheumatic complaints were, during this time, very prevalent, and occasioned a good deal of loss of service. During the following three quarters the vessel was almost altogether stationed at Vancouver's Island, where the ship's company enjoyed a comparative immunity from diseases of any importance. In May 1870 the Charybdis sailed with the flying squadron for the Sandwich Islands, and on entering the tropics rheumatic affections of a similar character to those which prevailed in the Michaelmas quarter of the previous year again made their appearance, and were, as before, tedious in their progress to recovery. With these exceptions there was very little sickness of any importance in this vessel. The daily number on the sick-list averaged 5·7 per cent of her complement.

The Pylades was not two months on the station, and during that period the only affections of any numerical importance on her sick-list were syphilis (chiefly contracted at Valparaiso) and catarrh.

Considering that during the greater part of the twelve months the Satellite was employed on the coasts of Mexico and Central America, her ship's company enjoyed a large measure of health. The daily number on the sick-list averaged 3·7 per cent. of her complement, and catarrhs, rheumatism, and boils and abscesses were the most prominent affections under treatment. One case of small-pox occurred in the person of an officer, who appears to have contracted the disease while travelling in the interior; but with this exception there was not a single case of febrile disease amongst the ship's company during the twelve months.

There

Pacific Station.

SLOOPS.

There was a reduction in the ratio of cases entered on the sick-list in this class of vessel, compared with the preceding year, equal to 196·5 per 1,080. The ratio is, however, not only higher than that of the average of the station for the period, but it is higher than the average taken for a period of fourteen years.

The Cameleon was a good deal at sea during the twelve months, making the passage to Esquimault, from thence to the Sandwich Islands, subsequently to Valparaiso, and thereafter cruising on the coast of South America. Rheumatic and catarrhal affections, with boils and abscesses, appear in greatest numbers on her sick-list. The number daily on the sick-list averaged 3·4 per cent. of her complement.

The ratio of cases entered on the sick-list of the Chanticleer was the highest of her class. Her cruising extended from one extremity of the station to the other, and the most predominant affections among her crew were syphilis, contracted at Valparaiso, catarrh, diarrhœa, dyspepsia, and more or less trifling casualties. The daily number sick averaged 6·4 per cent. of her complement.

The returns from the Reindeer are imperfect, and those in office show nothing of a noteworthy character. During the Christmas quarter of 1869, she left Valparaiso for Mazatlan, and during the following quarter she was employed on the coasts of Mexico and Central America. Rheumatism and catarrh were the most prevalent affections amongst the ship's company.

GUN VESSELS.

The ratio of cases entered on the sick-lists of the gun-vessels was higher than in any other class of vessel in the squadron, a fact attributable to one of them having been much employed on the coast of Mexico and Central America during the twelve months.

The Boxer, which was almost altogether employed at Vancouver's Island, was upon the whole a very healthy ship. A few cases of bronchitis were entered on the sick-list in the Michaelmas quarter of 1869, but with that exception there was no sickness of any importance among the ship's company.

The Ringdove shows the largest ratio of cases entered on the sick-list of any vessel on the station, and the number of men daily sick on board averaged 8·8 per cent. of her complement.

Pacific Station.

plement. During almost the whole twelve months this vessel was employed on the tropical division of the station, and the ship's company seem to have suffered much from febrile diseases and from diarrhœa, as well as from boils and abscesses. The diarrhœa, which prevailed almost epidemically in the Michaelmas quarter of 1869, was attributed to the coarse character of some American pork which had been supplied to the ship.

There is very little of importance in the returns from the Sparrowhawk, which vessel was altogether stationed at Vancouver's Island and in its vicinity during the twelve months. Rheumatism and catarrh were the predominating affections. The daily number sick averaged 5·3 per cent. of her complement.

STORE SHIP. MARINE DETACHMENT.

There was little or no sickness of any kind in the Nereus, and with the exception of a slight outbreak of influenza in the Lady quarter of 1870, the same may be said of the Marine detachment.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 32·1 per 1,000

Fifty persons were invalided from the squadron during the period embraced in this Abstract, being in the ratio of 24·3 per 1,000 of force, which is a reduction, compared with the preceding twelve months, equal to 5· per 1,000.

Of the total number invalided, one was for the sequelæ of fever; nine for diseases of the brain and nervous system; thirteen for diseases of the organs of respiration; five for diseases of the heart and bloodvessels; seven for diseases of the genito-urinary organs; six for rheumatism and diseases of the bones and joints; two for diseases of the special senses; three for diseases of the skin and cellular tissue; three for dyspepsia and debility; and one for wounds.

Deaths.

Average Rate of Mortality for Fourteen Years, 9·5 per 1,000.

Twenty-two deaths occurred in the squadron during the twelve months, thirteen of which were from various forms of disease,

disease, and nine from wounds and injuries and drowning. The total death-rate was 10·7 per 1,000 of force, which is an increase compared with the preceding twelve months of 1·1 per 1,000. Pacific Station.

Of the deaths from disease two were from fever; two from diseases of the brain and nervous system; seven from diseases of the respiratory organs; one from jaundice; and one from disease of the kidneys.

The details in connection with the deaths from violence will be found by referring to Table II. of the Appendix to this station.

WEST COAST OF AFRICA AND CAPE OF GOOD HOPE STATION.

SICK RATE.

Average Ratio of Cases placed on the Sick-list for Fourteen Years, 1949·8 per 1,000.

West Coast of Africa and Cape of Good Hope Station.

THE squadron employed on this station during the period embraced in this Abstract comprised nineteen vessels; viz., four of the sixth rate; one sloop; one steam-vessel; nine gunvessels; three storeships, one of which was permanently stationed at Ascension, and another at Jellah Coffee; and one receiving ship permanently stationed in Simon's Bay. The total mean force corrected for time was 1,900, but in estimating the ratio of cases entered on the sick-list it will be necessary, in consequence of defective returns, to consider the force as 1,730. The total number of cases entered on the sick-list was 2,983, which is in the ratio of 1724·2 per 1,000, being an increase, compared with the preceding year, equal to 164·9 per 1,000, but, as will be observed, considerably below the average of the station taken for fourteen years.

In 1869 the Cape of Good Hope Station was united to the West Coast of Africa, and placed under one command. For several years, however, the ships actually employed at the Cape colony have been so few in number, that this new arrangement of the station does not materially affect a comparison between the ratios of disease of former years, either on the West Coast of Africa or on the Cape Station itself, the latter indeed having, from 1864 until its severance in 1869, been attached to the East Indies Station.

SIXTH RATE.

The only return obtained from the Danäe is for the Michaelmas quarter of 1869, and but little information is to be obtained from it. The vessel appears to have been stationed

tioned off Lagos, where several of the crew who had crossed the bar, and were unable for two days to return to their ship, contracted fever. The cases, however, were not of great severity, the average duration of each being between ten and eleven days. Various forms of dyspepsia were common, as were boils and abscesses. The number daily on the sick-list averaged about 4 per cent. of the ship's company. West Coast of Africa and Cape of Good Hope Station.

During the first six months of 1870 the Gladiator was moored in Simon's Bay, Cape of Good Hope, where her crew appear to have enjoyed excellent health. Although the men had free access to the shore, abundant leave being granted them, only one case of syphilis occurred during the six months. The immunity from this destructive form of disease thus enjoyed by them was entirely attributed to the efficient manner in which the Contagious Diseases Act was carried out. Several cases of ephemeral fever occurred during the Lady quarter; and in the Midsummer quarter, which is the winter season at the Cape, the weather being cold and wet, rheumatism and catarrh were prevalent. With these exceptions, there was little of interest in the medical history of this vessel. The number daily on the sick-list averaged 3 per cent. of the complement.

The Rattlesnake was at the Cape of Good Hope during the Michaelmas and part of the Christmas quarters of 1869. Subsequently she was almost altogether employed on the coast of Africa. The most prominent affections during the former period of her service were catarrh and rheumatism, and during the latter, as might be expected, various forms of fever, chiefly remittent and ephemeral. Boils and abscesses also occasioned much loss of service while the ship was cruising on the coast. The daily number sick in the vessel averaged 4·6 per cent. of the ship's company.

The returns from the Sirius are for the Christmas quarter of 1869 and the first six months of 1870. During all this time she was employed on the coast of Africa, with the exception of a short trip to St. Helena and Ascension. The greatest loss of service in this vessel was occasioned by fever of a remittent type, of which there were a good many cases both in the Christmas quarter of 1869 and the Lady quarter of 1870. Most of this disease was attributable to service off Lagos, and with this exception there was scarcely any sickness in the ship. The daily number sick was small, averaging only 2·8 per cent. of the crew.

West Coast of Africa and Cape of Good Hope Station.

SLOOP.

The returns from the Peterel are for the Michaelmas and Christmas quarters of 1869 and the Lady quarter of 1870, during almost the whole of which time she was employed cruising on the coast of Africa. Remittent and intermittent fevers, and febrile affections of an ephemeral type, were the most prevalent diseases on board, but they appear neither to have been numerous nor severe, although somewhat tedious in their cure. The daily per-centage on their sick-list was 3·8.

STEAM VESSEL.

The Pioneer shows the largest ratio of cases of any vessel on the station. This is readily explicable by the fact of her having been during the whole twelve months employed either at Lagos or in the Rivers Niger, Nun, Calabar, Cameroons, and Bonny. As might be expected, fevers were the most prominent diseases; and from them alone one-half of her white crew were invalided. The fevers were almost altogether of malarial origin. Fortunately, they occasioned no mortality. There was not indeed a death from any cause in the vessel during the year. With the exception of fevers there was little or no disease of any importance amongst the ship's company. Cases of dyspepsia in all its Protean forms were common, and doubtless attributable to the same influences as induced the fevers, or were the sequelæ of those diseases. The number daily on the sick-list averaged 6·2 per cent. of the crew.

GUN VESSELS.

The vessels of this class were for the most part employed in river service on the coast of Africa, and much sickness prevailed amongst them in consequence. In the Christmas quarter of 1869, remittent fever prevailed epidemically in the Fly, consequent on prolonged exposure to malarious influences in the River Congo, where on one occasion she lay for four days lashed to the wharf at Banana Creek, coaling. This and subsequent exposure caused so much sickness on board as to give for the whole twelve months an average of 9·1 per cent. of her crew daily under treatment. The Growler also suffered much from febrile diseases occasioned by exposure in the Congo and other rivers. The Jaseur was only about a month or six weeks on the station, and there is no sickness of any importance in her returns. During the Michaelmas and Christmas quarters of 1869, the Lynx was visited by a severe epidemic of remittent fever consequent upon service at Lagos and in the River Nun. Many cases of rheumatism were under treatment at the same time, probably dependent on the same cause, or occurring as a sequela of the fever. The

fever

fever was of a very severe character, causing two deaths and much loss of service. Several cases of dysentery also occurred at the same time, one of which proved fatal. The returns from this vessel give very little information in connection with all this sickness. The daily number on her sick-list averaged 6· per cent. of her complement. The Myrmidon was stationed during the Michaelmas and Christmas quarters of 1869 on the Coast of Africa; and during the former period, while at Sierra Leone, a good many cases of ephemeral and remittent fever occurred. She was upon the whole a very healthy vessel, however. During the Lady quarter of 1870 she was employed at the Cape of Good Hope. The ship's company of the Pandora suffered a good deal from boils and abscesses, due, it is said, to the large issue of salt provisions on board. There was also considerable loss of service from febrile affections, the result of exposure to malarious influences in the Bonny and Cameroons rivers. The daily number on her sick-list averaged 7·5 per cent. of the crew.

West Coast of Africa and Cape of Good Hope Station.

There is nothing of a noteworthy character in the remaining vessels of this class.

The Flora, permanently stationed at Ascension, was a particularly healthy vessel, the daily number on her sick-list averaging only 1·7 of her complement. There is nothing in the returns from the Industry to call for notice. Her crew seem to have enjoyed a fair measure of health, her daily percentage of sick being 3·6. She was employed carrying provisions to the squadron on the coast, and had little or no river service. In the Vindictive, permanently stationed at Jellah Coffee, several cases of fever occurred in the early part of the Lady quarter of 1870. They were mostly of an ephemeral character. The daily number on the sick-list of this vessel averaged 5 per cent. of the ship's company.

STORE SHIP.

The returns from the Seringapatam are defective. In the only one in office there is no sickness to call for notice.

RECEIVING SHIP.

West Coast of Africa and Cape of Good Hope Station.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 57·9 per 1,000.

One hundred and eighteen persons were invalided in the squadron during the twelve months, which is in the ratio of 62·1 per 1,000 of force, being a decrease, compared with the previous year, equal to 11·1 per 1,000, but still somewhat in excess of the average of the station taken for fourteen years.

Of the total number invalided, twenty-seven were for the sequelæ of fever; ten, for diseases of the brain and nervous system; ten, for diseases of the organs of respiration; seven, for diseases of the heart and bloodvessels; four, for diseases of the alimentary canal; one, for disease of the liver; nine, for diseases of the genito-urinary organs; ten, for rheumatism and diseases of the bones and joints; six, for diseases of the special senses; fourteen, for diseases of the skin and cellular tissue; fifteen, for dyspepsia and climatic cachexia; and five, for the results of wounds and injuries of various kinds.

Deaths.

Average Ratio of Mortality for Fourteen Years, 25·4 per 1,000.

Fifteen deaths occurred in the squadron during the period embraced in this Abstract, which is in the ratio of 7·8 per 1,000 of force, being a decrease to the extent of 2· per 1,000 compared with the previous twelve months, when the mortality was the lowest on record.

Of the deaths from disease, three were from the sequelæ of fever; one, from delirium tremens; three, from diseases of the heart and bloodvessels; three, from diseases of the alimentary canal; one, from acute rheumatism; and one from abscess.

The details in connection with the deaths from violence will be found by referring to Table II. of the Appendix to this station.

EAST INDIES STATION.

Sick-Rate.

Average Ratio of Cases placed on the Sick-List for Fourteen Years, 1748·4 per 1,000.

East Indies Station.

Eleven vessels were employed on the East Indies Station during the period embraced in this Abstract; but as two of them were portions of two separate commissions on the station, they represent in all thirteen vessels; viz., one fourth-rate; one sixth-rate; three sloops; three gun-vessels; and five troop ships. The total force, corrected for time, was 2,170; but in computing the ratio of cases entered on the sick-list, 2,100 will be taken as the force, it being necessary, in consequence of defective returns, to deduct seventy from the total force. The latter, however, will be taken in estimating the invaliding and death rates. The total number of cases entered on the sick list was 3,821, which is in the ratio of 1819·5 per 1,000, being a slight increase, compared with the preceding year.

FOURTH RATE.

The only vessel of this class in the squadron was the Forte, and although she visited many parts of the station, from Zanzibar to Suez, and from Trincomalee to Bombay, the general health of the ship's company appears to have been tolerably good, the daily number on the sick-list averaging 4· per cent. of her complement. The most prominent affections were catarrh, rheumatism, diarrhœa, and boils and abscesses. In the Christmas quarter of 1869, when the vessel was at Suez, diarrhœa was quite epidemic amongst the ship's company, and was attributed to the lower temperature of the atmosphere than that to which the men had been accustomed for some time, as well as to bad water and change of diet. Great loss of service was occasioned, while the

East Indies Station.

vessel was at Bombay, by syphilis contracted there; and most of the cases of rheumatism, which subsequently were placed on the sick-list, had a syphilitic origin.

SIXTH RATE.

The Cossack was employed variously during the twelve months at Madras, Trincomalee, Zanzibar, Johanna, and the Seychelles Islands. On two occasions, one at Madras, the other at Zanzibar, numerous cases of fever, classed as remittent, appeared among the ship's company; but they do not seem to have been of much severity. At Madras they occurred after leave granted to a certain number of the men, and were attributed to exposure to the sun. At Zanzibar fever and diarrhœa were considered due to the filthy state of the beach, off which the ship was anchored. Cholera was prevailing epidemically on shore at the time, and a dread of the disease being imported on board led to the anchorage being shifted to a distance of about six miles from the town, where, although no active disease appeared, both officers and men suffered severely from general malaise. With these exceptions there was very little of interest in the medical history of the Cossack. The daily number on the sick-list averaged 4·9 per cent. of the ship's company.

SLOOP.

Compared with the preceding year, there was a reduction in the ratio of cases entered on the sick-list in this class of vessel to the extent of 147·7 per 1,000. There was also a considerable reduction in the invaliding and death rates.

During the Michaelmas quarter of 1869 the Daphne was altogether employed on the East Coast of Africa, from Zanzibar to the southward of Mozambique, and during this period the ship's company suffered much from diarrhœa and dysentery, two cases of the latter disease proving fatal. Subsequently, while at Bombay, in the Persian Gulf, and in the Red Sea, the crew appear to have enjoyed a fair measure of health. The greatest loss of service was from venereal diseases contracted at Bombay. The daily number on the sick-list of the Daphne averaged 5·8 per cent. of her complement.

The Dryad was much employed during the first two quarters embraced in this Abstract at the Mauritius, at Madagascar, and in the Mozambique Channel, and during this time the crew were really very healthy. Subsequently, while at Ceylon and Bombay, febrile affections became numerous, but were of very trifling importance, and a considerable loss of service was due to venereal diseases contracted at the latter place. With these exceptions there

there is very little of a noteworthy character in the returns from this vessel. The daily number on the sick-list averaged 4·1 per cent. of her crew. East Indies Station.

The Nymphe was employed in the Mozambique Channel during the Michaelmas quarter of 1869, and in the Christmas quarter she was at Bombay, Muscat, Kurrachee, and in the Persian Gulf. During this time fevers of a simple continued type occurred, and there was much loss of service from venereal disease, contracted at different ports. In fact, during the whole twelve months syphilis caused more loss of service in this vessel than any other form of disease. The cases were as a rule exceedingly tedious in their progress. The daily number of sick averaged 6· per cent. of the ship's company.

The returns from the Bullfinch are only for six months, during most of which time she was employed in the Mozambique Channel. Rheumatism, and boils and abscesses caused the greatest loss of service on board. Many of the rheumatic cases had a syphilitic origin. The average daily per-centage of sick in this vessel was 5·2. GUN VESSEL.

The Star shows a high ratio of cases. Compared with the preceding twelve months, however, there was a reduction in her sick-rate to the extent of 1552·4 per 1,000. During the first six months of the period embraced in this report she was employed in the Mozambique Channel and on the East Coast of Africa, where the prevailing diseases were febrile affections both of a periodic and of a simple continued type, rheumatism, and diarrhœa. In the Lady quarter of 1870, the greatest loss of service was from syphilis, but there was not much disease of any kind on board. The daily number sick averaged 8·4 per cent. of her complement.

The return from the Teazer is only for three months, during which she was employed on the West Coast of India. The greatest loss of service in this vessel was occasioned by boils and abscesses and general debility. Her average daily per-centage of sick was 8·.

There is not much to be said with reference to these vessels. During the winter months they are employed transporting troops from Bombay to Suez, and *vice versâ*. The affections which prevailed on board were mostly simple continued fevers, rheumatism, diarrhœa, dyspepsia, and debility. The average ratio of cases shown by them is below that TROOP SHIPS.

East Indies Station.

of the previous twelve months by 457·8 per 1,000. The Euphrates and Malabar were paid off and re-commissioned on the station during the period embraced in this Abstract. In the Euphrates, in the portion of her first commission, the daily per-centage of sick was 5·9; during her second commission it was 6·. The number daily sick in the Jumna gave an average of 4·4 per cent. of her ship's company. In the Malabar, in the portion of her first commission, the daily per-centage was 3·5, being the lowest of any vessel in the squadron. In the second commission the per-centage of sick daily was 5·.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 45·1 per 1,000.

One hundred and thirty-nine persons were invalided from the squadron during the twelve months, which is in the ratio of 64· per 1,000, being an increase, compared with the preceding year, equal to 11·3 per 1,000.

Of the total number invalided, ten were for the sequelæ of fevers; eight for diseases of the brain and nervous system; twenty-one for diseases of the respiratory organs; thirteen for diseases of the heart and blood-vessels; seven for diseases of the alimentary canal; eight for diseases of the liver; nineteen for diseases of the genito-urinary organs; ten for rheumatism and diseases of the bones and joints; four for diseases of the special senses; five for diseases of the skin and cellular tissue; twenty-nine for different forms of climatic cachexia, and five for various kinds of injuries.

Deaths.

Average Ratio of Mortality for Fourteen Years, 15·4 per 1,000.

There were twenty-four deaths in the force during the year, which is in the ratio of 11· per 1,000, being a reduction, compared with the preceding twelve months, equal to ·7 per 1,000.

East Indies Station.

Of the total number of deaths, two were from diseases of the brain and nervous system; two from diseases of the respiratory organs; five from diseases of the heart and blood-vessels: seven from diseases of the alimentary canal; one from abscess of the liver; two from diseases of the skin and celluiar tissue; one from exhaustion; and four from casualties, the details of which will be found by referring to Table II. of the Appendix to this station.

CHINA STATION.

SICK-RATE.

Average Ratio of Cases placed on the Sick-List for Fourteen Years, 2059·1 per 1,000.

China Station.

TWENTY vessels were employed in the squadron on this station during the twelve months: but as four of them were paid off and re-commissioned on the station during the period, the twenty vessels, in point of fact, represent twenty-four. Besides these there were eight gun-boats, the returns from which are defective. The squadron comprised two iron-clads; one vessel of the second rate; one of the sixth rate; five sloops; nine gun-vessels; one steam-vessel; eight gun-boats; three surveying vessels; one troop ship; and one receiving ship, permanently stationed at Hong Kong. The total force, corrected for time, was 3,210; but, in estimating the ratio of cases entered on the sick-list, the force will, on account of defective returns, be considered as 3,170, the total force being taken in computing the invaliding and death rates. The total number of cases entered on the sick-list was 5,218, which is in the ratio of 1646· per 1,000, being an increase, compared with the preceding twelve months, but, as will be observed, greatly below the average sick-rate of the station, taken for fourteen years.

IRON-CLAD.

The Ocean was the only vessel of this class on the station; she, however, represents two vessels, having been paid off at Hong Kong on the 9th of May 1870, and re-commissioned on the following day by a new complement of officers and men, brought out from England in the Donegal, the old crew returning to England in that vessel. During the time the latter crew were on the station, a little over ten months, they appear to have enjoyed a fair measure of health, the daily number sick averaging 4·8 per cent, of the ship's company.

During

China Station.

IRON CLAD *continued.*

During the six months of 1869 embraced in this Abstract, and up to the 23rd of February 1870, the vessel was stationed in Japan, for the most part at Yokohama; subsequently she proceeded to Hong Kong, where she remained until paid off. During her stay in Japan the greatest loss of service was from syphilitic diseases, contracted at the Yoshiwarra, the great public brothel of Yokohama. In the Lady quarter of 1870 these diseases were exceptionally numerous, and virulent, and in many cases were followed by symptoms of constitutional syphilis of a most malignant type. Catarrhal affections, diarrhœa, dyspepsia, and boils and abscesses formed considerable items on the sick-list. Of specific fevers, one case of typhus and three of enteric fever were contracted at Yokohama, and two cases of rubeola and one of enteric fever at Hong Kong.

The new crew by which the ship was commissioned on the 10th of May were employed during the remainder of the quarter at Hong Kong, and, as the duty of cleaning and preparing the Ocean for her new commission devolved upon them, they were necessarily considerably exposed to the various influences which render Hong Kong so unhealthy during the Midsummer quarter of the year. Until the cleaning was completed, and the vessel in all respects fitted for their reception, they were hulked on board the Princess Charlotte until the 1st of June. The diseases which were numerically of most importance were simple continued fever, diarrhœa, and boils and abscesses. Ten cases of sun-stroke were also entered on the sick-list during this time, but none were of a serious nature. With these exceptions there was little of importance, in a medical point of view, in connection with the new ship's company. The daily number sick averaged 3·7 per cent of the complement.

SECOND RATE

The returns from the Rodney are for the last six months of 1869, during which time she was at Yokohama, afterwards at Hong Kong, and finally on her passage to England. The ratio of cases entered on her sick-list was greatly in excess of that of the previous twelve months, a circumstance which is accounted for by the fact that on the ship being about to leave for England many of the best of her crew volunteered to remain on the station, and their places were filled up by men from other ships, the majority of whom were more or less enfeebled from climatic influences. Cases of continued fever, mostly of an ephemeral character, were exceedingly prevalent, particularly in the Michaelmas quarter. In one or two instances

China Station.

SECOND RATE *continued.*

they were more protracted in character. They were doubtless attributable mainly to exposure to solar heat, from which cause, also, nine cases of sun-stroke occurred during the same period; some of them were slight, but others were suddenly struck down, insensible. All recovered. Diarrhœa was also a common affection, and during the Christmas quarter was attributed to the use of salt provisions, and of preserved potatoes. The greatest loss of service from any single disease was from boils and abscesses, which were particularly numerous during the Michaelmas quarter, when they were attributed to the sudden change from the cool and dry climate of Japan to that of Hong Kong, where the temperature was high and the atmosphere loaded with moisture. The rapid change also from fresh to salt provisions was considered to have influenced their appearance. The daily number on the sick-list of the Rodney averaged 5·2 per cent. of the ship's company.

SIXTH RATE.

As during the previous twelve months, the ratio of cases entered on the sick-list of the Pearl, the only vessel of this class on the station, was very low: the daily number on her sick-list was, in fact, the lowest in the squadron, averaging only 2·3 per cent. of her complement. Her returns are for the first nine months of the period embraced in this Abstract, during which time catarrh, rheumatism, and syphilis were the most prominent affections on the sick-list. A single case of small-pox and two of measles occurred on board in the Lady quarter of 1870, but with these exceptions there is nothing of a noteworthy character in the medical history of this vessel.

SLOOP.

The Icarus was a very healthy ship; with the exception of an outbreak of small-pox which occurred in the Christmas quarter of 1869, there is indeed, nothing in her returns to call for observation; she was employed in Japan and on the coast of China, particularly at Shanghai. Small-pox is supposed to have been imported into the ship by a marine who had been drafted from the Zebra, on board which vessel the disease was prevailing epidemically. Two of the cases of small-pox in the Icarus proved fatal. The daily number sick in this vessel averaged 2·8 per cent. of the complement.

The Rinaldo was paid off at Hong Kong on the 9th of May and re-commissioned on the following day. During the first commission the ship's company seem to have enjoyed very good health, and there is nothing in her returns of any importance

China Station.

importance or interest. The daily number sick during that time averaged 4·7 per cent of the crew. During the short period occupied by the second commission, the vessel left Hong Kong and proceeded to Japan, and cases of diarrhœa were exceedingly prevalent; the disease was attributed to the action of various influences, and it seems to have been of rather a protracted character. It was the only subject in the medical history of the vessel worthy of comment. It caused considerable loss of service, and raised the daily average number sick to 7· per cent.

The Zebra was paid off at Hong Kong on the 9th of May 1870, and re-commissioned on the following day. During both commissions the ship's company appear to have enjoyed a fair measure of health; the daily number sick previous to her being paid off averaging 3·9 per cent. of the crew, and after being re-commissioned 3·6. The only point in the medical history of the vessel was an outbreak of small-pox, which occurred in the Christmas quarter of 1869. The disease was contracted at Shanghai, and made its appearance on board just as the vessel had left the coast of China for Japan. Twenty-three cases altogether presented themselves during the epidemic. The first six cases were landed at Hiogo and the remainder at Yokohama. All made good recoveries.

GUN VESSEL.

Compared with the preceding twelve months there was a reduction in the ratio of cases entered on the sick-list of this class of vessel, to the extent of 279·8 per 1,000. The vessels showing the highest ratio of cases were the Algerine, the Avon, the Elk, and the Midge.

The Algerine was employed in Japan from July to November of 1869, and during this time the most prominent affections were boils and abscesses, and diarrhœa. Subsequently she was on the Straits division of the station, and cruised off the coast of Sumatra where the same affections were most prevalent. There was little or no disease, however, of any importance at any time on board this vessel. The daily number on the sick list averaged 6·6 per cent. of the complement.

In the early part of the Michaelmas quarter of 1869, the Avon was employed on the coast of Borneo, from whence she proceeded to Hong Kong, in the vicinity of which she remained during the remainder of the twelve months. While off the island of Balabac and at Labuan, numerous cases of simple

China Station.

continued fever occurred and caused considerable loss of service; they were considered attributable to insolation and wet. Subsequently at Hong Kong, Swatow, and other ports in the neighbourhood, ague became a common affection, and was supposed to be due to influences to which the men were previously exposed on the Straits division of the station. The daily per centage of sick in this vessel was 9·1.

The returns from the Elk are defective. She was almost altogether employed on the Coast of Borneo, chiefly about Labuan, where her crew suffered severely from malarious fever, dyspepsia, diarrhœa, and boils and abscesses. The daily number sick averaged 9·7 per cent. of the ship's company, being the largest sick-list of any vessel of the class.

The high sick-rate in the Midge was mainly due to the prevalence of cases of malarial fevers originally contracted at Labuan. During the greater part of the twelve months she was stationed at Hong Kong and the southern ports of China, where considerable loss of service was occasioned by syphilitic diseases. The daily per-centage of sick was 4·2.

There is nothing of interest in the returns from the remaining vessels of this class.

STEAM VESSEL.

The Salamis was for the most part employed in Japan, and on the North Coast of China, but she had some service at Hong Kong and the southern Chinese ports. At Yokohama there was much loss of service from syphilis, which subsequently showed its sequelæ in different forms, especially in the shape of rheumatism. A single case of small-pox occurred on board during the Christmas quarter of 1869. It was contracted at Foochow, but the disease did not develope itself until the vessel had gone to sea. Great care was taken in the isolation of the man, and happily no other case occurred. Towards the close of the Midsummer quarter of 1870, diarrhœa became very prevalent, both with officers and men, and was considered attributable to the sudden change from the heat of Hong Kong to the very wet and much cooler weather which was experienced when the vessel was passing through the Inland Sea of Japan. Altogether the ship's company of the Salamis appear to have enjoyed very fair health, the number on the sick-list daily averaging 3·9 per cent. of the complement.

SURVEYING VESSEL.

The return for the Rifleman is only for about seven weeks, during which time she was in the Straits of Balabac, at Labuan

China Station.

Labuan, and finally at Hong Kong. Malarious fevers were very numerous, and were the only affections of importance on board. The per-centage of daily sick averaged 5·5.

SURVEYING VESSEL *continued.*

The Sylvia was in two separate commissions during the twelve months, and, in both, her duties were confined to Japan. Venereal diseases, diarrhœa, and boils and abscesses were the most prominent affections on her sick-list. From the 1st of July 1869 to the 6th of May 1870, when she was paid off, the daily per-centage of sick averaged 5·7; subsequently it was 4·1.

TROOP SHIP.

The duties on which the Adventure was employed kept her cruising between Japan and the various ports of China. There was no extraordinary prevalence of disease on board at any time, nor were the cases which presented themselves of much importance as a rule. The daily number on the sick-list averaged 4·6 per cent. of the complement.

RECEIVING SHIP.

The Princess Charlotte is permanently stationed at Hong Kong. Although the ratio of cases entered on her sick-list is not high, and the daily number sick averaged only 3·6 of the crew, this is attributable altogether to the comparative immunity from disease they enjoyed during the winter months. In the Michaelmas quarter of 1869 simple continued fever appears to have been epidemic on board, and diarrhœa, rheumatism, and boils and abscesses were very prevalent. They appear, however, to have been unimportant in character.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 63·4 per 1,000.

The total number of persons invalided from the squadron during the period of this Abstract was 194, which is in the ratio of 60·4 per 1,000 of force, being an increase compared with the preceding twelve months equal to 12·4 per 1,000.

Of these eighteen were invalided for the sequelæ of fever; eleven for diseases of the brain and nervous system; twenty-three for diseases of the respiratory organs; sixteen for diseases of the heart and blood-vessels; fifteen for diseases of the alimentary canal; four for diseases of the liver; thirty-eight

China Station.

eight for diseases of the genito-urinary organs; twenty-two for rheumatism and diseases of the bones and joints; five for diseases of the special senses; eleven for diseases of the skin and cellular tissue; twenty-three for dyspepsia and climatic cachexia; and eight for various kinds of injuries.

DEATHS.

Average ratio of Mortality for Fourteen Years, 37·2 per 1,000,
„ „ deducting for loss of Slaney, 36·7.

The total number of deaths was seventy-eight, but of these thirty-four are attributable to the shipwreck of the Slaney, so that the total death-rate which is 24·2 per 1,000 is, in so far, exceptional. Excluding the mortality occasioned by the loss of that vessel, the ratio of mortality would be only 13·7 per 1,000, which is almost precisely the same as that of the preceding twelve months.

Of the deaths from disease, five were from fever, including small-pox; nine from diseases of the brain and nervous system; eight from diseases of the respiratory organs; three from diseases of the heart and blood-vessels; five from diseases of the alimentary canal; one from abscess of the liver; one from Bright's disease; and two from diseases of the skin and cellular tissue.

The details in connection with the deaths from violence will be found by referring to Table II. of the Appendix to this Station.

AUSTRALIAN STATION.

Sick-Rate.

Average Ratio of Cases placed on the Sick-list for Fourteen Years, 1410·1 per 1,000.

Australian Station.

Two vessels of the sixth rate, and two sloops comprised the squadron on this station during the period of this Abstract. The mean force corrected for time was 670, and the total number of cases of disease and injury entered on the sick-list 1,069, which is in the ratio of 1595·5 per 1,000, being a decrease, compared with the preceding twelve months, equal to 62·1 per 1,000, but greatly in excess of the average sick-rate of the station taken for fourteen years.

SIXTH RATE.

The Blanche was stationed in New Zealand during the first seven months of this Return, and subsequently cruising on the East Coast of Australia from Sydney to Torres Straits. The only matter of any interest in the medical history of the vessel was the occurrence of four cases of enteric fever while the vessel was at Wellington. The disease was attributed to the use of impure water which had been obtained from a river at the back of the town, in which people bathe and wash clothes, and into which drains open. While cruising on the Australian coast, catarrhs and boils and abscesses were the most prevalent affection. The daily number on the sick-list averaged 5·7 per cent. of the complement. During the whole twelve months not a single case of syphilis was placed on the sick-list. The same immunity from this disease existed during the previous year.

The greatest loss of service in the Challenger was occasioned by rheumatism, catarrh, boils and abscesses, and ulcers. She was employed mostly cruising between Australia and New Zealand, and the rheumatic affections were considered attributable to vicissitudes of climate and exposure to damp. Altogether, the crew appear to have enjoyed a

Australian Station.

fair measure of health, the daily number on the sick-list averaging 4· per cent. of the complement.

SLOOPS.

The Returns from the Rosario are imperfect, being only for six months. During that period the most noteworthy feature in her medical history was the occurrence of two cases of enteric fever at Sydney, the disease being attributable to sewer emanations in Farm Cove. Catarrhal affections were numerous during the Christmas quarter of 1869, and were occasioned by exposure to climatic vicissitudes by the men when on leave on shore; but with these exceptions there was little or no disease of any importance among the ship's company. The daily per-centage on the sick-list was 4·

INVALIDING.

Average Ratio of Invaliding for Fourteen Years, 26·7 per 1000.

Seventeen persons were invalided from the squadron during the twelve months, which give a ratio of 25·3 per 1,000, being a decrease, compared with the preceding year, equal to 8·3 per 1,000.

Of the total number invalided, four were for diseases of the brain and nervous system; four, for diseases of the respiratory organs; one for disease of the testicle; three for rheumatism, and disease of the bones and joints; one for disease of the eyes; one for scrofula; one for dyspepsia; and two for injuries.

DEATHS.

Average Ratio of Mortality for Fourteen Years, 12·6 per 1,000.

THERE were three deaths in the squadron during the year, which give a ratio of 4·4 per 1,000, being a reduction compared with the preceding year, equal to 4·2 per 1,000, and in fact the lowest death-rate on this station on record.

The deaths from disease were one from enteric fever, and one from apoplexy. The third death was from drowning.

IRREGULAR FORCE.

SICK-RATE.

Average Ratio of Cases placed on the Sick-list for Fourteen Years, 1527·3 per 1,000.

Irregular Force.

There were fifty vessels in the Irregular Force during the period embraced in this Abstract, viz., three ironclads; one of the second-rate; eight of the fourth-rate; nine of the sixth-rate; seven sloops; six gun vessels; two steam vessels; eight troop ships; one store ship; and five unclassed vessels. The mean force corrected for time was 8,500, and the total number of cases of disease and injury entered on the sick-list, 11,513, which is in the ratio of 1354·4 per 1,000, being a trifling increase compared with the preceding year, when the sick-rate was exceptionally low. Returns for the whole twelve months were furnished by six of the vessels of the fourth-rate; two of the sixth-rate; four troop ships; and the store ship.

IRONCLADS

The only return from the Black Prince is for the Michaelmas quarter of 1869, when the vessel was cruising. During this time the ship's company appear to have enjoyed a fair measure of health; the predominating cases on the sick-list being boils, abscesses, ulcers, and casualties of greater or less severity. They, in fact, constituted more than one-half of the whole number sick. At the termination of the quarter the Black Prince was at Plymouth, after having visited Porto Santo and Bermuda.

In the Monarch, which had been on a voyage from England to Madeira, Bermuda, and Portland in the United States of America, catarrhal affections, sore throat, and rheumatism were very prevalent during the Lady quarter of 1870. This was attributed to the intense cold experienced at Portland, from which the men suffered much. During the Midsummer

Irregular Force.

quarter the Monarch was at Portsmouth, and for some time on an experimental cruise. The diseases which contributed most to the sick-list during this time were rheumatic and catarrhal affections, venereal diseases, boils and abscesses, and minor accidents. The disease which caused the greatest loss of service was gonorrhœa.

The Pallas was paid off on the 9th of October 1869. During the previous quarter she had been cruising off the coasts of Spain and Portugal, and had returned to Plymouth. The health of the ship's company during this time was very good, and there is nothing in her returns calling for any comment.

SECOND RATE.

During the Lady quarter of 1870, the Rodney was on the passage from China to England, where she was paid off on the 27th of April. On the passage, cases of simple continued fever, rheumatism, catarrh, diarrhœa, and boils and abscesses, were numerous, and a considerable loss of service was occasioned by more or less trifling casualties. There was little or no disease, however, of any great activity or severity, and altogether, considering the tedious voyage they underwent, the crew appear to have enjoyed a fair measure of health.

FOURTH RATE.

There was a considerable increase in the ratio of cases in this class of vessel, compared with the preceding twelve months. This was mainly attributable to the almost constant employment of the vessels at sea, the great majority of them being attached to the Flying Squadron.

The Bristol, the sea-going training ship of naval cadets, was very much at sea during the twelve months. In the Michaelmas quarter of 1869 she was at Madeira, on the coast of Brazil, and in England. In the Christmas quarter she left England, visited the West Indies, and on the 31st of December was close to England on her return. In the Lady quarter of 1870 she was on the coast of Portugal, and in the Midsummer quarter on the coast of Spain and in the Mediterranean. During these cruises the ship's company were necessarily victualled very much on salt provisions (altogether 169 days out of the twelve months), and there was in consequence a great loss of service from boils and abscesses, and ulcers. Rheumatism was also a very prevalent affection, and in the Lady quarter of 1870 a slight epidemic of measles occurred. The disease was contracted in England, but did not make its appearance until the vessel was at sea.

Thirteen

Irregular Force.

Thirteen cases altogether occurred, but they were very mild. The loss of service from boils and abscesses, and ulcers, amounted to 2,607 days, so that seven men were daily incapacitated for duty from these causes alone.

The vessels of the fourth-rate attached to the Flying Squadron were the Endymion, the Liffey, the Liverpool, and the Phœbe. In the beginning of July 1869 they arrived at Madeira, from whence they proceeded to Bahia, Rio de Janeiro, the River Plate, the Cape of Good Hope, Australia, Tasmania, New Zealand, Japan, Vancouver's Island, and at the close of the Midsummer quarter of 1870 they were at sea "en route" for Valparaiso, having been last at Honolulu, in the Sandwich Islands. Considering the length of time the vessels were at sea, the varieties of climate through which they passed, the constant drills and exercises through which the crews were put, and the prolonged use of salt meat to which they were subjected, they appear to have enjoyed a very fair measure of health. The diseases which most prominently affected them were rheumatism, catarrh, and simple febrile affections, the results of exposure to climatic vicissitudes; but the greatest loss of service was occasioned by the prevalence of boils, abscesses, and ulcers, which were no doubt attributable to the nature of their diet. Casualties of greater or less importance were numerous, as almost necessarily happens where much competitive drilling is carried on; nevertheless, the flying squadron, as a force, was remarkably healthy, as is evidenced by the fact that the average daily per-centage of sick in the Endymion was only 2·5; in the Liverpool, 4·3; in the Liffey, 4·; and in the Phœbe, 2·8.

SIXTH RATE.

The only vessel of this class from which returns were rendered for the whole twelve months was the Scylla, which formed one of the Flying Squadron, and in her the ratio of cases entered on the sick-list was exceptionally high. As in the other vessels of the Flying Squadron, the diseases causing greatest loss of service were boils and abscesses and ulcers; rheumatic, catarrhal, and simple febrile affections were also prevalent. The daily number on the sick-list averaged 5· per cent. of the ship's company.

SLOOP.

None of the vessels of this class were in the force for any length of time. The Daphne shows the highest ratio of cases entered on the sick-list. She was on her passage from the East Indies Station to England to be paid off, and the only

Irregular Force.

return from her is for about seven weeks. During this period the most prominent affections were rheumatism, catarrh, and more or less trifling casualties.

GUN VESSELS, AND STEAM VESSEL.

The returns from the vessels of these classes are for such short periods as to be of little or no practical value.

TROOP SHIP.

The average ratio of cases entered on the sick-lists of this class of vessel was below that of the previous twelve months. In some of the vessels the ratio was exceedingly low; the highest was in the Himalaya, but the cases which occupied her sick-list were not of much importance.

SHIPS UNCLASSED.

The Donegal, Revenge, and Terrible were employed in carrying out crews to recommission vessels paid off on foreign stations, and returning to England with the paid-off crews. There is nothing in their returns calling for remark. The Espoir was on her passage to Bermuda, where she was to be employed as a dredging vessel.

Invaliding.

Average Ratio of Invaliding for Fourteen Years, 24·5 per 1000.

One hundred and seventy-two persons were invalided from the Force during the twelve months, which is in the ratio of 20·2 per 1,000, being a decrease, compared with the preceding year, to the extent of 11·3 per 1,000.

Of the total number invalided, two were for the sequelæ of fever; twenty-four for diseases of the brain and nervous system; forty-six for diseases of the respiratory organs; twenty for diseases of the heart and bloodvessels; two for diseases of the alimentary canal; four for diseases of the liver; sixteen for diseases of the genito-urinary organs; seventeen for rheumatism and diseases of the bones and joints; seven for diseases of the special senses; seven for diseases of the skin and cellular tissue; eleven for dyspepsia and debility; and sixteen for injuries of various kinds.

Deaths.

Average Ratio of Mortality for Fourteen Years, 10· per 1,000.

There were eighty-four deaths in the Force during the twelve months, which is in the ratio of 9·8 per 1,000, being an increase, compared with the preceding year, equal to 1·9 per 1,000.

Of the total number of deaths from disease, seven were from fevers; seven from diseases of the brain and nervous system; twenty-six from diseases of the respiratory organs; eight from diseases of the heart and bloodvessels; five from diseases of the alimentary canal; four from diseases of the liver; two from rheumatism; and one from scrofula.

The details in connection with the deaths from violence will be found by referring to Table II. of the Appendix to the Force.

TOTAL FORCE.

Sick-Rate.

Average Ratio of Cases placed on the Sick-list for Fourteen Years, 1409·1 per 1,000.

Total Force.

During the period embraced in the present Abstract, the Total Force was 47,840, but in consequence of defective returns from various vessels the Force taken in estimating the ratio of cases placed on the sick-list is 47,320. The Total Force, however, has been taken in computing the invaliding and death rates, the returns under those heads being complete. The total number of cases of disease and injury entered on the sick-list was 57,921, which is in the ratio of 1224· per 1,000, being an increase, compared with the preceding year, equal to 27·7 per 1,000. This ratio, however, as will be perceived, is much below the average sick-rate of the Force taken for fourteen years.

The following Table shows the ratios of cases entered on the sick-list on each station :—

Stations.	Ratio per 1,000 of Cases of Disease and Injury.
Home	896·2
Mediterranean	1376·4
North America and West Indies	1559·4
South East Coast of America	1075·4
Pacific	1441·3
West Coast of Africa and Cape of Good Hope	1724·2
East Indies	1819·5
China	1646·
Australia	1595·5
Irregular Force	1354·4

In comparing this Table with that of the previous twelve months, it will be perceived that there is a slight increase on the

the Home and Mediterranean stations, East Indies, and in the Irregular Force, and a considerable increase on the North American and West Indies, West Coast of Africa and Cape of Good Hope, and China stations. The highest ratios were on the East Indies, West Coast of Africa and Cape of Good Hope, China, Australia, and North America and West Indies stations. Total Force.

On the East Indies Station some of the vessels were much employed on the East Coast of Africa, in the Red Sea, and in the Persian Gulf, and their crews suffered from more or less trifling febrile affections, diarrhœa, and climatic debility. Although the sick-rate on this station was higher than that of any other, it was only slightly in excess of the ratio of the previous twelve months.

The ratio of cases entered on the sick-list in the squadron on the West Coast of Africa and Cape of Good Hope Station greatly exceeded that of the previous twelve months, but it was much below the average sick-rate of the station taken for fourteen years. The most prevalent affections were those of malarial origin, and were attributable to service in the Niger, the Congo, and other rivers.

In China, although the sick-rate of the squadron exceeded that of the preceding twelve months, it was by no means high, being indeed below the average ratio of the station taken for fourteen years, to the extent of 413·1 per 1,000. The most prevalent affections in China and Japan were catarrh, diarrhœa, and syphilis, and in the southern division of the station, at Borneo, considerable loss of service was occasioned by malarial fevers.

Although the ratio of cases entered on the sick-list on the Australian Station is comparatively high, it was much below that of the previous twelve months. Rheumatic affections were not infrequent in vessels employed on the Coast of New Zealand, and catarrh and boils and abscesses caused considerable loss of service in one vessel while cruising along the east coast of Australia.

There was a great increase in the ratio of cases entered on the sick-list in the squadron on the North America and West Indies Station. Unhappily, yellow fever was extensively epidemic during the twelve months, but the diseases which

Total Force

were numerically most important were fortunately of a comparatively trifling character.

The number of cases entered on the sick-list per man was, on the Home Station, ·8; Mediterranean, 1·3; North America and West Indies, 1·5; South East Coast of America, 1·; Pacific, 1·4; West Coast of Africa and Cape of Good Hope, 1·7; East Indies, 1·8; China, 1·6; Australia, 1·5; and in the Irregular Force, 1·3.

The following Table shows the average ratio of cases of disease and injury in the various classes of vessels, and in the Marine detachments serving abroad.

RATES.	Ratio per 1,000 of Force.	RATES.	Ratio per 1,000 of Force.
Iron-clad	1266·6	Coast Guard Ship	1110·7
Second Rate	1706·2	Training Ship	662·9
Fourth Rate	1298·5	Yacht	327·7
Sixth Rate	1520·9	Troop Ship	1330·
Sloop	1558·8	Store Ship	1084·5
Gun Vessel	2002·2	Training Brig	859·5
Steam Vessel	1504·8	Receiving Ship	2035·7
Gun Boat	1433·3	Surveying Vessel	1816·6
Gun Boats (with defective Returns)	1326·1	Floating Battery and Dockyard	1682·8
Stationary Ship	777·9	Marine Detachment	757·8
Drill Ship	962·5		

It will be observed, that of all the sea-going vessels the lowest ratio of cases was in the ironclads. With the exception of the South East Coast of America, the West Coast of Africa and Cape of Good Hope, the East Indies, and Australia, these vessels were to be found on every station, and in the Irregular Force, and in all they held a favourable position in comparison with the other vessels of the squadron.

The highest ratios of cases were in the gunvessels, second-rate, and sloops.

SECOND RATE

Only one vessel of this class was employed in the Force during the twelvemonths, and her condition was somewhat exceptional. She was preparing to leave China for England, and many of the best of her crew remained behind as volunteers on the station, their places being taken by men from other ships, many of whom were in a very debilitated condition;

condition; this accounts in a great measure for the high sick-rate she shows. Total Force.

SLOOPS.

There were vessels of the Sloop class on every station, and the Irregular Force. The highest sick-rate in these vessels appears on the Home Station, but there was, in point of fact, only one vessel of the class for a very short time on the station, and as her complement was very small, and made less by correction for time, a very small number of cases of disease would show a somewhat exceptional sick-rate. The highest ratio in the sloops on foreign stations was in the East Indies, where they were much employed in the Mozambique Channel, on the East Coast of Africa, in the Persian Gulf, and in the Red Sea.

GUN VESSELS.

With the exception of Australia, these vessels were on all the stations, and in the Irregular Force. From their light draught of water they are liable to be much employed on river service, and, as might be anticipated, their sick-rate is proportionately high. As during the preceding twelve months, it was, in fact, the highest of any class of vessel.

INVALIDING.

Average Ratio of Invaliding for Fourteen Years, 34·2 per 1,000.

The total number of persons invalided during the period embraced in this Abstract was 1,541, which is in the ratio of 32·2 per 1,000 of force, being an increase, compared with the preceding twelve months (when the invaliding rate was one of the lowest on record), equal to 1·2 per 1,000.

The following Table shows the invaliding rates on the different stations, and in the Irregular Force:—

Stations.	Ratio per 1,000 of Force Invalided.
Home	26·4
Mediterranean	37·1
North America and West Indies	34·2
South East Coast of America	32·8
Pacific	24·3
West Coast of Africa and Cape of Good Hope	62·1
East Indies	64·
China	60·4
Australia	25·3
Irregular	20·2

Total Force.

Compared with the preceding year, there was a reduction in the invaliding rates on the Pacific, West Coast of Africa, and Australia stations, and in the Irregular Force. The greatest increase was on the South East Coast of America Station, and it was also large on the East Indies, and China stations.

Deaths.

Average Ratio of Mortality for Fourteen Years, 14· per 1,000.

The total number of deaths from disease and injury during the twelve months was 496, of which 362 were caused by disease, and 134 by injuries of various kinds, and drowning. The total death-rate was 10·3 per 1,000 of force, which is an increase, compared with the preceding year, equal to 2· per 1,000. This increase was altogether attributable to the prevalence of yellow fever in the West Indies, and to the loss of the Slaney on the China Station, whereby thirty-four persons were drowned. The death-rate from disease alone was 7·5 per 1,000. During the preceding twelve months it was only 5·8.

The following Table shows the death-rates on the different stations, and in the Irregular Force, during the period embraced in this Abstract :—

Stations.	Ratio of Deaths per 1,000 of Force.
Home	7·
Mediterranean	7·
North America and West Indies	23·1
South East Coast of America	18·7
Pacific	10·7
West Coast of Africa and Cape of Good Hope	7·8
East Indies	11·
China	24·2
Australia	4·4
Irregular Force	9·8

Compared with the preceding year, there was an increase on the Home Station, to the extent of ·5 per 1,000; on the North

North America and West Indies, of 14·6; South East Coast of America, 5·2; Pacific, 1·1; and on the China Station, of 10·9. Total Force.

The greatest mortality from disease on the Home Station was from diseases of the respiratory organs; on the Mediterranean Station, from diseases of the brain and nervous system; on the North America and West Indies Station, from yellow fever; on the South East Coast of America Station, from yellow fever; on the Pacific Station, from diseases of the respiratory organs; on the West Coast of Africa and Cape of Good Hope Station, the deaths from the sequelæ of fever, from diseases of the heart and bloodvessels, and from diseases of the alimentary canal, were equal; on the East Indies Station the greatest mortality was from diseases of the alimentary canal; on the China Station, from diseases of the brain and nervous system; on the Australian Station the deaths were from enteric fever, and apoplexy; and in the Irregular Force the greatest mortality was from diseases of the respiratory organs.

The following Table shows the deaths by violence on each station, and their nature:—

STATIONS.	Fell from Aloft.	Drowned.	Accidental Wounds.	Suicide.	Various.			Total.
					Poisoning.	Asphyxia by Impaction of Food in Larynx.	Not stated.	
Home	5	10	11	1	1 *a*)	–	–	28
Mediterranean	2	2	3	1	–	–	–	8
North America and West Indies	1	8	2	–	–	–	–	11
South East Coast of America	–	–	1	–	–	–	1	2
Pacific	3	2	3	1	–	–	–	9
West Coast of Africa and Cape of Good Hope	1	–	1	–	–	1	–	3
East Indies	1	1	2	–	–	–	–	4
China	1	41	1	–	1 (*b*)	–	–	44
Australia	–	1	–	–	–	–	–	1
Irregular Force	7	12	5	–	–	–	–	24
Total	21	77	29	3	2	1	1	134

(*a*) By Morphia. (*b*) By Alcohol.

Compared with the preceding year, there was an increase in the ratio of deaths by violence equal to ·4 per 1,000 of force.

APPENDIX.

HOME STATION.

TABLE, No. 1.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	Total.	Ratio per 1,000 of Force.
Iron-clad	Bellerophon	565	140	156	1114·2	6	42·8	-	-	-	-
	Captain	495	80	152	1900·	1	12·5	-	-	-	-
	Hercules	650	650	804	1236·9	13	20·	6	2	8	12·3
	Inconstant	600	530	461	869·8	2	3·7	-	1	1	1·8
	Minotaur	760	760	680	894·7	19	25·	2	-	2	2·6
	Monarch	540	270	329	1218·5	6	22·2	-	1	1	3·7
	Northumberland	685	685	732	1068·6	30	43·7	-	3	3	4·3
	Scorpion	135	65	105	1615·3	4	61·5	-	-	-	-
	Volage	310	90	146	1622·2	3	33·3	-	-	-	-
	Warrior	700	700	1,050	1500·	23	32·8	2	1	3	4·2
			3,970	4,615	1162·4	107	26·9	10	8	18	4·5
Sixth Rate	Valorous	300	90	158	1755·5	2	22·2	-	1	1	11·1
Stationary Ship	Agincourt	730	730	533	730·1	27	36·9	2	1	3	4·1
	Asia	1,020	1,020	623	610·7	28	27·4	10	-	10	9·8
	Cambridge	840	840	565	672·6	10	11·9	7	-	7	8·3
	Duke of Wellington	1,000	1,000	1,109	1109·	42	42·	6	-	6	6·
	Excellent	1,070	1,070	787	735·5	30	28·	3	-	3	2·8
	Fisgard	280	280	241	860·7	31	110·7	1	-	1	3·5
	Indus	1,035	1,035	521	503·3	20	19·3	11	2	13	12·5
	Mersey	400	400	276	690·	4	10·	5	1	6	15·
	Nankin	60	60	35	583·3	9	150·	-	-	-	-
	Pembroke*	1,455	1,455	1,525	1048·1	31	21·3	9	3	12	8·2
	Royal Adelaide	975	975	659	675·8	32	32·8	12	1	13	13·3
	St. Vincent	705	705	571	809·9	32	45·3	4	1	5	7·
			9,570	7,445	777·9	296	30·9	70	9	79	8·2
Drill Ship	Brilliant	30	30	24	800·	-	-	-	-	-	-
	Castor	55	55	70	1272·7	-	-	-	-	-	-
	Dædalus	50	50	51	1020·	-	-	-	-	-	-
	Durham	35	35	41	1171·4	-	-	-	-	-	-
	Eagle	50	50	29	580·	-	-	-	-	-	-
	President	40	40	28	700·	-	-	-	-	-	-
	Trincomalee	30	30	27	900·	-	-	-	-	-	-
	Winchester	30	30	38	1266·6	-	-	-	-	-	-
			320	308	962·5	-	-	-	-	-	-

* Including Naval Barracks and Reserve at Sheerness.

APPENDIX—HOME STATION—TABLE, No. I—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Coast Guard Ship	Achilles	320	320	257	803·1	5	15·6	1	1	2	6·2
	Black Prince	335	250	352	1408·	1	4·	2	1	3	12·
	Dauntless	145	70	147	2100·	–	–	–	–	–	–
	Duncan	335	220	234	1063·6	–	–	2	–	2	9·
	Hector	395	395	382	967·	13	32·9	1	1	2	5·
	Lion	600	200	186	930·	25	125·	2	–	2	10·
	Pallas	315	155	154	993·5	4	25·8	3	1	4	25·8
	Penelope	215	215	227	1055·8	1	4·6	–	–	–	–
	Repulse	305	100	153	1530·	–	–	–	–	–	–
	Resistance	335	335	427	1274·6	7	20·8	2	2	2	5·9
	Royal George	365	180	157	872·2	3	16·6	3	1	4	22·2
	Trafalgar	315	120	66	550·	6	50·	1	1	2	16·6
	Valiant	315	315	466	1479·3	9	28·5	3	1	4	12·6
	Wyvern	195	95	91	957·8	1	10·5	1	–	1	10·5
			2,970	3,299	1110·7	75	25·2	19	9	28	9·4
Training Ship	Boscawen	550	550	263	478·1	7	12·7	2	1	3	5·4
	Britannia	380	380	370	973·6	1	2·6	1	–	1	2·6
	Ganges	465	465	420	903·2	15	32·2	2	–	2	4·3
	Implacable	570	570	316	554·3	15	26·3	4	–	4	7·
	Impregnable	940	940	557	592·5	28	29·7	7	–	7	7·4
			2,905	1,926	662·9	66	22·7	16	1	17	5·8
Sloop	Racer	165	40	83	2075·	–	–	2	–	2	50·
Steam Vessel	Buzzard	85	85	101	1188·2	2	23·5	–	–	–	–
	Dasher	150	150	177	1180·	2	13·3	2	–	2	13·3
	Helicon	70	70	64	914·2	5	71·4	–	–	–	–
	Jackal	55	55	33	600·	–	–	–	–	–	–
(Surveying)	Lightning	35	5	10	2000·	1	200·	–	–	–	–
	Medusa	70	70	61	871·4	–	–	–	–	–	–
			435	446	1025·2	10	22·9	2	–	2	4·5
Yacht	Victoria and Albert	180	180	59	327·7	–	–	1	–	1	5·5
Gun Vessel	Flirt	40	40	39	975·	–	–	–	–	–	–
Gun Boat	Orwell	40	40	43	1075·	–	–	–	–	–	–
Store Ship	Fox	100	100	112	1120·	–	–	–	–	–	–
Training Brig	Liberty	75	75	87	1160·	–	–	–	–	–	–
	Martin	100	100	77	770·	1	10·	–	–	–	–
	Sealark	115	115	70	608·6	–	–	–	–	–	–
	Squirrel	130	130	127	976·9	–	–	–	–	–	–
			420	361	859·5	1	2·3	–	–	–	–
	TOTALS		21,080	18,894	896·2	557	26·4	120	28	148	7·
	Average Ratios for Fourteen Years				1017·3	–	25·1	–	–	–	8·3

APPENDIX—HOME STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad - -	Hercules - -	2	1 Fractured skull; fell from aloft. 1 Fractured spine; by a bag of coal falling on him.
	Inconstant - -	1	Fractured thigh, &c.; by a spar falling on him.
	Monarch - -	1	Fractured skull; fell from upper to main deck.
	Northumberland -	3	2 Drowned; washed overboard. 1 Fractured skull; fell from aloft.
	Warrior - - -	1	Drowned; jumped overboard.
Sixth Rate - -	Valorous - -	1	Fractured skull; by a blow from a block.
Stationary Ship -	Agincourt - -	1	Fractured skull; fell from aloft.
	Indus - - -	2	1 Fell down hatchway. 1 Result of wound in hand by a piece of metal.
	Mersey - - -	1	Fractured spine; fell out of a window.
	Pembroke - -	3	2 Killed by explosion of boiler of "Thistle." 1 Poisoned by morphia.
	Royal Adelaide -	1	Fractured skull; fell from aloft.
	St. Vincent - -	1	Drowned; while on leave.
Coast Guard Ship	Achilles - - -	1	Drowned; not stated how.
	Black Prince - -	1	Fractured skull; fell from aloft.
	Hector - - -	1	Fractured spine; fell down main-hatch.
	Pallas - - -	1	Found drowned.
	Resistance - -	2	Drowned; fell overboard.
	Royal George - -	1	Drowned; by swamping of boat.
	Trafalgar - -	1	Drowned; while intoxicated.
	Valiant - - -	1	Drowned; fell into canal basin.
Training Ship -	Boscawen - -	1	Wound of knee; received while on leave.
	TOTAL - - -	28	

TABLE, No. III.

SHOWING the Comparative Sickness in the different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Ironclad	3,970	4,615	1162·4	107	26·9	10	8	18	4·5
Sixth Rate	90	158	1755·5	2	22·2	—	1	1	11·1
Stationary Ship	9,570	7,445	777·9	296	30·9	70	9	79	8·2
Drill Ship	320	308	962·5	—	—	—	—	—	—
Coast Guard Ship	2,970	3,299	1110·7	75	25·2	19	9	28	9·4
Training Ship	2,905	1,926	662·9	66	22·7	16	1	17	5·8
Sloop	40	83	2075·	-	-	2	—	2	50·
Steam Vessel	435	446	1025·2	10	22·9	2	—	2	4·5
Yacht	180	59	327·7	-	-	1	—	1	5·5
Gun Vessel	40	39	975·	—	—	—	—	—	—
Gun Boat	40	43	1075·	—	—	—	—	—	—
Store Ship	100	112	1120·	—	—	—	—	—	—
Training Brig	420	361	859·5	1	2·3	—	—	—	—
TOTALS	21,080	18,894	896·2	557	26·4	120	28	148	7·
Average Ratios for Fourteen Years			1017·3	-	25·1	—	—	—	8·3

APPENDIX—HOME STATION—*continued.*

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead; with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	12,445	13,776	1106·5	Not stated		104	25	129	10·4
1857 - -	10,400	11,109	1068·4	340	32·7	86	25	111	10·7
1858 - -	12,600	15,710	1246·9	302	23·9	86	35	121	9·6
1859 - -	19,300	22,775	1180·	516	26·7	127	61	188	9·7
1860 - -	23,500	25,670	1092·3	690	29·4	193	70	263	11·2
1861 - -	22,900	24,525	1071·	715	31·2	157	63	220	9·6
1862 - -	20,760	23,641	1138·8	640	30·8	128	45	173	8·2
1863 - -	21,570	22,788	1056·4	625	28·9	107	46	153	7·
1864–5 -	20,810	20,899	1004·2	569	27·3	128	29	157	7·5
1865–6 -	22,225	20,279	911·9	482	21·6	106	26	132	5·9
1866–7 -	23,080	21,037	911·4	507	21·9	124	31	155	6·7
1867–8 -	22,390	19,474	869·7	477	21·3	150	42	192	8·5
1868–9 -	22,060	19,323	875·9	501	22·7	109	36	145	6·5
1869–70 -	21,080	18,894	896·2	557	26·4	120	28	148	7·
TOTAL - -	275,120	279,900	1017·3	6,921	25·1	1,725	562	2,287	8·3

APPENDIX—*continued.*

MEDITERRANEAN STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	Total.	Ratio per 1,000 of Force.
Iron-clad	Bellerophon	565	425	478	1124·7	9	21·1	–	1	1	2·3
	Caledonia	615	615	1,330	2162·6	54	87·8	1	2	3	4·8
	Enterprise	140	140	160	1142·8	10	71·4	1	–	1	7·1
	Lord Warden	680	680	785	1154·4	17	25·	3	3	6	8·8
	Prince Consort	645	564	874·4		10	15·5	2	1	3	4·6
	Royal Oak	655	665	675	1030·5	18	27·4	5	–	5	7·6
			3,160	3,992	1263·2	118	37·3	12	7	19	6·
Sloop	Cruiser	180	180	227	1261·1	12	66·6	5	–	5	27·7
	Rapid	130	130	293	2253·8	4	30·7	–	–	–	–
			310	520	1677·4	16	51·6	5	–	5	16·1
Steam Vessel	Antelope	90	90	183	2033·3	4	44·4	–	–	–	–
	Newport	80	80	127	1587·5	1	12·5	1	1	2	25·
	Psyche	70	70	145	2071·4	3	42·8	1	–	1	14·2
			240	455	1895·8	8	33·3	2	1	3	12·5
Gun Vessel	Jaseur	75	55	152	2763·6	4	72·7	–	–	–	–
	Lee	65	65	167	2569·2	2	30·7	–	–	–	–
			120	319	2658·3	6	50·	–	–	–	–
Gun Boat	Cockatrice	50	50	96	1920·	1	20·	–	–	–	–
	Trinculo	45	45	51	1133·3	1	22·2	–	–	–	–
	Wizard	45	45	68	1511·1	–	–	–	–	–	–
			140	215	1535·7	2	14·2	–	–	–	–
Receiving Ship	Hibernia	150	150	170	1133·3	3	20·	2	–	2	13·3
	TOTALS		4,120	5,671	1376·4	153	37·1	21	8	29	7·
	Average Ratios for Fourteen Years				1458·5	–	39·	–	–	–	9·9

APPENDIX—MEDITERRANEAN STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad - -	Bellerophon - -	1	Fractured skull; fell from aloft.
	Caledonia - -	2	1 Fractured skull; fell from aloft. 1 Drowned; suicide.
	Lord Warden - -	3	1 Fractured skull; fell from copper punt to launch. 1 Fractured skull; fell over battlements. 1 Supposed to have been drowned.
	Prince Consort -	1	Fractured skull; fell over a cliff.
Steam Vessel -	Newport - -	1	Found drowned.
	TOTAL - - -	8	

TABLE, No. III.

SHOWING the Comparative Sickness in the Different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad - - -	3,160	3,992	1263·2	118	37·3	12	7	19	6·8
Sloop - - - -	310	520	1677·4	16	51·6	5	–	5	16·1
Steam Vessel - - -	240	455	1895·8	8	33·3	2	1	3	12·5
Gun Vessel - - -	120	319	2658·3	6	50·	—	—	—	—
Gun Boat - - -	140	215	1535·7	2	14·2	—	—	—	—
Receiving Ship - -	150	170	1133·3	3	20·	2	–	2	13·3
TOTALS - - -	4,120	5,671	1376·4	153	37·1	21	8	29	7·
Average Ratios for Fourteen Years - - -			1458·5	- -	39·	–	–	–	9·9

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead, with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	11,090	15,153	1366·3	171	15·4	110	32	142	12·8
1857 - -	7,120	9,476	1330·9	208	29·2	53	24	77	10·8
1858 - -	5,390	7,381	1369·4	147	27·3	42	18	60	11·1
1859 - -	11,100	16,792	1512·2	416	37·5	90	35	125	11·2
1860 - -	14,210	20,915	1472·6	988	69·5	105	40	145	10·2
1861 - -	16,600	25,946	1561·2	753	45·4	134	38	172	10·4
1862 - -	9,950	15,423	1550·	350	35·1	70	27	97	9·7
1863 - -	8,470	13,844	1634·4	363	42·8	61	20	81	9·5
1864–5 -	8,045	10,723	1332·8	312	38·7	36	31	67	8·3
1865–6 -	6,340	9,366	1477·2	255	40·2	46	12	58	9·1
1866–7 -	5,380	7,231	1344·	170	31·5	27	8	35	6·5
1867–8 -	3,810	5,270	1383·2	106	27·8	28	10	38	9·9
1868–9 -	4,190	5,732	1368·	136	32·4	18	14	32	7·6
1869–70 -	4,120	5,671	1376·4	153	37·1	21	8	29	7·
TOTALS - -	115,815	168,923	1458·5	4,528	39·	841	317	1,158	9·9

APPENDIX—*continued.*

NORTH AMERICA AND WEST INDIES STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad	Defence	440	440	706	1604·5	28	63·6	21	1	22	50·
	Favorite	275	40	37	925·	1	25·	–	–	–	–
(1st Commission)	Royal Alfred	660	110	105	954·5	–	–	–	–	–	–
(2nd Commission)	Royal Alfred	760	630	693	1100·	13	20·6	4	1	5	7·9
			1,220	1,541	1263·1	42	34·4	25	2	27	22·1
Sixth Rate	Danaë	195	100	138	1380·	5	50·	–	–	–	–
	Eclipse	190	190	189	944·7	5	26·3	1	–	1	5·2
	Jason	265	200	198	990·	3	15·	–	1	1	5·
(1st Commission)	Racoon	290	100	141	14 0·	–	–	–	1	1	10·
(2nd Commission)	Racoon	305	50	173	3460·	2	40·	–	–	–	–
	Valorous	290	70	139	1985·7	4	57·1	–	1	1	14·2
			710	978	1377·4	19	26·7	1	3	4	5·6
Sloop	Barracouta	190	140	106	757·1	3	21·4	4	1	5	35·7
	Niobe	160	160	231	1443·7	1	6·2	3	2	5	31·2
	Royalist	130	130	249	1915·3	4	30·7	–	1	1	7·6
	Vestal	160	120	256	2133·3	7	58·3	7	–	7	58·3
			550	842	1530·9	15	27·2	14	4	18	32·7
Gun Vessel	Dart	70	70	69	985·7	1	14·2	–	–	–	–
	Lapwing	80	80	188	2350·	7	87·5	1	–	1	12·5
	Mullet	70	70	118	1685·7	1	14·2	–	–	–	–
	Philomel	80	80	194	2425·	6	75·	9	–	9	112·5
	Plover	80	40	33	825·	–	–	–	–	–	–
			340	602	1770·5	15	44·1	10	–	10	29·4
Gun Boats (5) (with defective Returns)		–	120	–	–	5	41·6	3	–	3	25·
Receiving Ship	Aboukir	210	210	719	3423·8	12	57·1	15	–	15	71·4
Floating Battery and Dockyard.	Terror	350	350	589	1682·8	12	34·2	2	2	4	11·4
Force for Estimating Cases		–	3,380	5,271	1559·4	120	34·2	70	11	81	23·1
Total Force of Station corrected for time		–	3,500								
Average Ratios for Fourteen Years		–	–	–	1574·5	–	29·2	–	–	–	18·7

APPENDIX—NORTH AMERICA AND WEST INDIES STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad - -	Defence - - -	1	Dislocated neck; fell from aloft.
	Royal Alfred - - -	1	
Sixth Rate -	Jason - - -	1	Drowned; boat swamped.
	Racoon - - -	1	Drowned; fell overboard.
	Valorous - - -	1	Accidental rifle-shot through the head.
Sloop - -	Barracouta - -	1	Found drowned.
	Niobe - - -	2	1 Drowned; fell overboard. 1 Injury to spine; fell over pier.
	Royalist - - -	1	Drowned; swept overboard by a rope.
Floating Battery and Dockyard.	Terror - - -	2	1 Found drowned. 1 Drowned; attempting to swim across ferry.
	TOTAL - - -	11	

TABLE, No. III.

SHOWING the Comparative Sickness in the different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Ironclad - - - -	1,220	1,541	1263·1	42	34·4	25	2	27	22·1
Sixth Rate - - -	710	978	1377·4	19	26·7	1	3	4	5·6
Sloop - - - -	550	842	1530·9	15	27·2	14	4	18	32·7
Gun Vessel - - -	340	602	1770·5	15	44·1	10	–	10	29·4
Gun Boats (with defective Returns) - - - -	120	- -	- -	5	41·6	3	–	3	25·
Receiving Ship - -	210	719	3423·8	12	57·1	15	–	15	71·4
Floating Battery and Dockyard - - -	350	589	1682·8	12	34·2	2	2	4	11·4
Force for estimating Cases	3,380	5,271	1559·4	120	34·2	70	11	81	23·1
Total Force of Station, corrected for time - -	3,500								
Average Ratios for Fourteen Years - - -			1574·5	- -	29·2	–	–	–	18·7

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead; with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	7,845	12,178	1552·3	184	23·4	177	29	206	26·3
1857 - -	3,640	6,141	1687·1	75	20·6	79	12	91	25·
1858 - -	2,600	5,046	1938·4	81	31·2	39	15	54	20·8
1859 - -	2,780	4,361	1568·7	70	25·2	18	8	26	9·4
1860 - -	2,250	4,011	1782·7	81	36·	87	12	99	44·
1861 - -	4,750	8,452	1779·4	172	36·2	172	28	200	42·1
1862 - -	10,135	16,543	1632·2	328	32·3	170	35	205	20·2
1863 - -	7,050	10,668	1513·1	186	26·3	34	22	56	7·9
1864–5 -	6,100	8,586	1391·7	153	25·	79	18	97	15·9
1865–6 -	5,400	8,979	1662·7	157	29·	28	25	53	9·8
1866–7 -	*5,055 †5,295	6,935	1371·9	136	25·6	52	17	69	13·
1867–8 -	*4,760 †4,900	7,364	1547·	204	41·6	34	12	46	9·3
1868–9 -	*3,950 †4,100	5,200	1316·4	108	26·3	25	10	35	8·5
1869–70 -	*3,380 †3,500	5,271	1559·4	120	34·2	70	11	81	23·1
TOTAL - -	*69,695 †70,345	109,735	1574·5	2,055	29·2	1,064	254	1,318	18·7

* For Cases. † For Invalidings and Deaths.

APPENDIX—*continued.*

SOUTH-EAST COAST OF AMERICA STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Sixth Rate	Pylades	280	210	110	523·8	4	19·	2	-	2	9·5
Sloop	Racoon	275	70	81	1157·1	6	85·7	-	-	-	-
Gun Vessel	Beacon	70	70	114	1628·5	4	57·1	1	-	1	14·2
	Cracker	70	70	151	2157·1	3	42·8	-	1	1	14·2
	Speedwell	80	80	54	675·	2	25·	-	1	1	12·5
		220	219	1450·		9	40·9	1	2	3	13·6
Receiving Ship	Egmont	120	*90 †120	135	1500·	2	16·6	7	-	7	58·3
Marines, Falkland Islands		29	20	11	550·	-	-	-	-	-	-
	TOTALS		*610 †640	656	1075·4	21	32·8	10	2	12	18·7
	Average Ratios for Fourteen Years				1648·1	-	30·5	-	-	-	22·1
	Deducting for Men lost in the Bombay										16·6

* For Cases. † For Invalidings and Deaths.

APPENDIX—SOUTH EAST COAST OF AMERICA STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Gun Vessel -	Cracker - - -	1	Tetanus; the result of wound of foot by a broken bottle.
	Speedwell - -	1	Not stated.
		2	

TABLE, No. III.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Sixth Rate -	210	110	523·8	4	19·	2	–	2	9·5
Sloop - -	70	81	1157·1	6	85·7	—	—	—	—
Gun Vessel -	220	319	1450·	9	40·9	1	2	3	13·6
Receiving Ship	*90 †120	135	1500·	2	16·6	7	–	7	58·3
Marine Detachment, Falkland Islands	20	11	550·	—	—	—	—	—	—
TOTAL - -	*610 †640	656	1075·4	21	32·8	10	2	12	18·7
Average Ratios for Fourteen Years - - - -		1648 1	–	–	30·5	–	–	–	22·1
Deducting for Men lost in the Bombay - -		–	–	–	–	–	–	–	16·6

* For Cases. † For Invalidings and Deaths.

APPENDIX—SOUTH EAST COAST OF AMERICA—*continued.*

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead, with the Rates per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	1,200	2,697	2247·5	51	42·5	18	6	24	20·
1857 - -	1,500	2,818	1878·5	44	39·4	24	4	28	18·7
1858 - -	1,270	2,201	1733·1	44	34·6	34	5	39	30·7
1859 - -	1,000	1,690	1690·	35	35·	10	4	14	14·
1860 - -	1,250	1,770	1415·9	30	24·	11	6	17	13·6
1861 - -	1,120	1,563	1395·5	31	27·7	14	4	18	16·1
1862 - -	1,420	2,315	1630·2	58	40·8	13	11	24	16·9
1863 - -	1,370	2,096	1456·9	36	26·2	7	13	20	14·5
1864–5 -	1,040	1,948	1873·	28	26·9	6	102	108	103·8
1865–6 -	1,235	2,081	1685·	42	34·	10	4	14	11·3
1866–7 -	*1,180 †1,215	1,717	1455·	35	28·8	10	1	11	6·
1867-8 -	1,040	1,639	1575·9	27	25·9	17	3	20	19·2
1868–9 -	1,180	1,864	1579·5	22	18·6	12	4	16	13·5
1869–70 -	*610 †640	656	1075·4	21	32·8	10	2	12	18·7
TOTAL - -	* 16,415 † 16,480	27,055	1648·1	504	30·5	196	169	365	22·1
								Average Ratio, deducting for Men lost in the Bombay - - - -	16·6

* For Cases. † For Invalidings and Deaths.

APPENDIX—*continued.*

PACIFIC STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad	Zealous (1st Commission)	510	255	471	1847·	4	15·6	4	1	5	19·6
	Zealous (2nd Commission)	800	415	651	1568·6	9	21·6	–	3	3	7·2
			670	1,122	1674·6	13	19·4	4	4	8	11·9
Sixth Rate	Charybdis	260	260	277	1065·3	6	23·	2	1	3	11·5
	Pylades	260	60	51	850·	2	33·3	1	–	1	16·6
	Satellite	250	250	253	1012·	1	4·	–	–	–	–
			570	581	1019·2	9	15·7	3	1	4	7·
Sloop	Camelcon	160	160	209	1306·2	3	18·7	–	2	2	12·5
	Chanticleer	150	150	301	2006·6	8	53·3	2	2	4	26·6
	Reindeer	160	* 80 † 160	111	1387·5	2	12·5	1	–	1	6·2
			* 390 † 470	621	1592·3	13	27·6	3	4	7	14·8
Gun Vessel	Boxer	65	65	62	953·8	1	15·3	–	–	–	–
	Ringdove	80	80	216	2700·	5	62·5	3	–	3	37·5
	Sparrowhawk	80	80	137	1712·5	1	12·5	–	–	–	–
			225	415	1844·4	7	31·1	3	–	3	13·3
Store Ship	Nereus	40	* 30 † 40	25	833·3	5	125·	–	–	–	–
Marine Detachment	San Juan	75	75	61	813·3	3	40·	–	–	–	–
	TOTALS		*1,960 †2,050	2,825	1441·3	50	24·3	13	9	22	10·7
	Average Ratios for Fourteen Years				1558·1	–	32·1	–	–		9·5

* For Cases. † For Invalidings and Deaths.

APPENDIX—PACIFIC STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad - -	Zealous (1st Commission).	1	Drowned; suicide.
	Zealous (2nd Commission).	3	1 Fracture of skull; fell from aloft.
			1 Drowned; fell overboard.
			1 Gun-shot wound of head; accidental.
Sixth Rate -	Charybdis - -	1	Found drowned.
Sloop - -	Cameleon - -	2	1 Fracture of skull; by blow from a stone while on shore.
			1 Fracture of skull; fell from aloft.
	Chanticleer - -	2	1 Fracture of skull; fell from aloft.
			1 Gun-shot wound; accidental.
	TOTAL - - -	9	

TABLE, No. III.

SHOWING the Comparative Sickness in the different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad - - -	670	1,122	1674·6	13	19·4	4	4	8	11·9
Sixth Rate - - -	570	581	1019·2	9	15·7	3	1	4	7·
Sloop - - - - -	*390 †470	621	1592·3	13	27·6	3	4	7	14·8
Gun Vessel - - -	225	415	1844·4	7	31·1	3	–	3	13·3
Store Ship - - -	*30 †40	25	833·3	5	125·	–	–	–	–
Marine Detachment, San Juan - - - -	75	61	813·3	3	40·	–	–	–	–
TOTAL - - -	*1,960 †2,050	2,825	1441·3	50	24·3	13	9	22	10·7
Average Ratios for Fourteen Years - - -			1558·1	- -	32·1	–	–	–	9·5

* For Cases. † For Invalidings and Deaths.

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead; with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	2,680	4,102	1530·6	78	29·1	18	5	23	8·6
1857 - -	2,170	3,119	1437·3	57	26·3	16	4	20	9·2
1858 - -	2,310	3,199	1380·5	63	27·3	15	4	19	8·2
1859 - -	2,650	4,130	1558·5	71	26·8	26	8	34	12·8
1860 - -	3,490	5,848	1675·6	124	35·5	13	24	37	10 6
1861 - -	2,650	3,966	1496·6	96	36·2	14	7	21	7·9
1862 - -	2,760	4,132	1497·1	94	34·	16	8	24	8·6
1863 - -	3,220	4,516	1402·4	104	32·2	19	12	31	9·6
1864–5 -	2,330	3,670	1575·1	104	44·2	12	7	19	8·1
1865–6 -	2,775	4,581	1650·8	75	27·	14	14	28	10·
1866–7 -	*2,525 †2,565	4,563	1807·1	79	30·7	13	8	21	8·1
1867–8 -	*2,450 †2,490	4,451	1816·7	111	44·5	17	11	28	11·2
1868–9 -	2,790	4,175	1496·4	82	29·3	19	8	27	9·6
1869–70 -	*1,960 †2,050	2,825	1441·3	50	24·3	13	9	22	10·7
TOTALS - -	*36,760 †36,930	57,277	1558·1	1,188	32·1	225	129	354	9·5

* For Cases.

† For Invalidings and Deaths.

APPENDIX—*continued.*

WEST COAST OF AFRICA AND CAPE OF GOOD HOPE STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	Total.	Ratio per 1,000 of Force.
Sixth Rate	Danaë	205	*50 †100	81	1620·	2	20·	-	-	-	-
	Gladiator	240	120	211	1758·3	3	25·	-	1	1	8·3
	Rattlesnake	340	340	542	1594·1	8	23·5	2	1	3	8·8
	Sirius	235	180	230	1277·7	5	27·7	-	-	-	-
			*690 †740	1,064	1542·	18	24·3	2	2	4	5·4
Sloop	Peterel	110	90	146	1622·2	1	11·1	1	-	1	11·1
Steam Vessel	Pioneer	40	40	129	3225·	11	275·	-	-	-	-
Gun Vessel	Fly	80	80	185	2312·5	9	112·5	-	-	-	-
	Growler	80	80	216	2700·	14	175·	-	-	-	-
	Jaseur	65	15	34	2266·6	2	133·3	-	-	-	-
	Lynx	80	80	237	2962·5	17	212·5	3	-	3	37·5
	Myrmidon	100	75	128	1706·6	5	66·6	1	-	1	13·3
	Pandora	80	80	146	1825·	5	62·5	1	-	1	12·5
	Pert	80	20	41	2050·	3	150·	1	-	1	50·
	Plover	90	45	48	1066·6	-	-	-	-	-	-
	Rocket	85	45	105	2333·3	7	155·5	-	-	-	-
		520		1,140	2192·3	62	119·2	6	-	6	11·5
Store Ship	Flora	195	195	208	1066·6	12	61·5	3	-	3	15·3
	Industry	85	85	119	1400·	4	47·	-	-	-	-
	Vindictive	70	70	151	2157·1	4	57·1	-	-	-	-
		350		478	1365·7	20	57·1	3	-	3	8·5
Receiving Ship	Seringapatam	160	*40 †160	26	650·	6	37·5	-	1	1	6·2
	TOTALS		*1,730 †1,900	2,983	1724·2	118	62·1	12	3	15	7·8
	Average Ratios for Fourteen Years				1949·8	-	57·9	-	-	-	25·4

* For Cases. † For Invalidings and Deaths.

APPENDIX—WEST COAST OF AFRICA and CAPE OF GOOD HOPE STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Sixth Rate - -	Gladiator - -	1	Fracture of skull; struck by a paddle-box boat.
	Rattlesnake - -	1	Fracture of skull; fell from aloft.
Receiving Ship -	Seringapatam - -	1	Asphyxia, by impaction of food in larynx.
	TOTAL - - -	3	

TABLE, No. III.

SHOWING the Comparative Sickness in the Different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Sixth Rate - - -	*690 †740	1,064	1542·	18	24·3	2	2	4	5·4
Sloop - - - - -	90	146	1622·2	1	11·1	1	—	1	11·1
Steam Vessel - - -	40	129	3225·	11	275·	—	—	—	—
Gun Vessel - - -	520	1,140	2192·3	62	119·2	6	—	6	11·5
Store Ship - - -	350	478	1365·7	20	57·1	3	—	3	8·5
Receiving Ship - -	* 40 †160	26	650·	6	37·5	—	1	1	6·2
TOTALS - - -	*1,730 †1,900	2,983	1724·2	118	62·1	12	3	15	7·8
Average Ratios for Fourteen Years - - -			1949·8	- -	57·9	—	—	—	25·4

* For Cases. † For Invalidings and Deaths.

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead; with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	1,630	3,060	1877·3	74	45·4	20	10	30	18·4
1857 - -	1,620	3,497	2158·6	71	43·8	27	9	36	22·2
1858 - -	1,870	3,964	2119·8	105	56·1	26	13	39	20·8
1859 - -	1,590	3,289	2068·5	131	82·4	84	6	90	56·6
1860 - -	1,845	3,289	1807·1	73	40·1	32	8	40	22·
1861 - -	2,050	3,839	1872·7	78	38·	43	27	70	34·1
1862 - -	2,190	3,743	1709·1	51	23·2	36	12	48	21·9
1863 - -	1,930	3,830	1884·4	80	41·4	28	15	43	22·3
1864–5 -	1,620	3,476	2145·6	115	70·9	31	15	46	28·3
1865–6 -	1,455	3,449	2370·4	141	96·9	75	9	84	57·7
1866–7 -	1,635	3,479	2127·8	121	74·	31	6	37	22·6
1867–8 -	1,860	3,670	1972·5	161	86·5	30	8	38	20·4
1868–9 -	1,720	2,682	1559·3	126	73·2	13	4	17	9·8
1869–70 -	* 1,730 † 1,900	2,983	1724·2	118	62·1	12	3	15	7·8
TOTAL - -	* 24,745 † 24,915	48,250	1949·8	1,445	57·9	488	145	633	25·4

* For Cases. † For Invalidings and Deaths.

APPENDIX—*continued.*

EAST INDIES STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Fourth Rate	Forte	545	545	770	1412·6	36	66·	5	–	5	9·1
Sixth Rate	Cossack	305	305	575	1885·2	13	42·6	4	2	6	19·6
Sloop	Daphne	175	130	284	2184·6	4	30·7	2	1	3	23·
	Dryad	165	165	221	1339·3	10	60·6	1	–	1	6·
	Nymphe	150	*125 †150	252	2016·	4	26·6	–	1	1	6·6
			*420 †445	757	1802·3	18	40·4	3	2	5	11·2
Gun Vessel	Bullfinch	95	*50 †95	105	2100·	2	21·	1	–	1	10·5
	Star	105	105	292	2780·9	–	–	–	–	–	–
	Teazer	70	20	76	3800·	4	200·	–	–	–	–
			*175 †220	473	2702·8	6	27·2	1	–	1	4·5
Troop Ship	Euphrates, 1st Commission	200	160	341	2131·2	34	212·5	2	–	2	12·5
	Euphrates, 2nd Commission	200	40	85	2125·	–	–	–	–	–	–
	Jumna	270	255	503	1972·5	19	74·5	5	–	5	19·6
	Malabar, 1st Commission	200	160	251	1568·7	13	81·2	–	–	–	–
	Malabar, 2nd Commission	200	40	66	1650·	–	–	–	–	–	–
			655	1,246	1902·2	66	100·7	7	–	7	10·6
	TOTAL		*2,100 †2,170	3,821	1819·5	139	64·	20	4	24	11·
	Average Ratios for Fourteen Years				1748·4	–	45·1	–	–	–	15·4

* For Cases. † For Invalidings and Deaths.

APPENDIX—EAST INDIES STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Sixth Rate -	Cossack - - -	2	1 Drowned; attempting to swim off to his ship.
			1 Fractured skull; fell from aloft.
Sloop - -	Daphne - - -	1	Scalded.
	Nymphe - -	1	Tetanus; following wound of wrist.
	TOTAL - - -	4	

Appendix—East Indies Station—*continued.*

Table, No. III.

Showing the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	Total.	Ratio per 1,000 of Force.
Fourth Rate	545	770	1412·6	36	66·	5	–	5	9·1
Sixth Rate	305	575	1885·2	13	42·6	4	2	6	19·6
Sloop	*420 †445	757	1802·3	18	40·4	3	2	5	11·2
Gun Vessel	*175 †220	473	2702·8	6	27·2	1	–	1	4·5
Troop Ship	655	1,246	1902·2	66	100·7	7	–	7	10·6
Total	*2,100 †2,170	3,821	1819·5	139	64·	20	4	24	11·
Average Ratios for Fourteen Years			1748·4		45·1	–	–	–	15·4

* For Cases. † For Invalidings and Deaths.

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead; with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	890	1,041	1170·9	36	40·5	7	10	17	19·1
1857 - -	1,060	1,366	1218·3	46	43·3	14	1	15	14·1
1858 - -	1,140	1,739	1525·5	29	25·4	12	6	18	15·8
1859 - -	1,160	1,539	1326·7	29	25·	8	4	12	10·3
1860 - -	1,570	2,199	1400·	49	31·3	11	7	18	11·4
1861 - -	1,880	3,797	2019·6	59	31·3	25	9	34	18·1
1862 - -	1,180	2,990	2533·8	38	32·2	5	23	28	23·7
1863 - -	1,350	2,576	1908·1	52	38·5	15	7	22	16·2
1864–5 -	2,200	3,223	1465·	82	37·2	30	14	44	20·
1865–6 -	2,030	3,603	1773·3	68	33·4	28	11	39	19·2
1866–7 -	1,550	2,730	1761·2	67	43·2	18	5	23	14·8
1867–8 -	3,170	6,470	2041·	247	77·9	32	15	47	14·8
1868–9 -	2,975	5,314	1786·2	157	52·7	21	14	35	11·7
1869–70 -	*2,100 †2,170	3,821	1819·5	139	64·	20	4	24	11·
TOTAL - -	*24,255 †24,325	42,408	1748·4	1,098	45·1	246	130	376	15·4

* For Cases. † For Invalidings and Deaths.

APPENDIX—*continued.*

CHINA STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	Total.	Ratio per 1,000 of Force.
Iron-clad	Ocean, 1st Commission	660	560	735	1312·5	38	67·8	6	3	9	16·
	Ocean, 2nd Commission	695	100	227	2270·	5	50·	–	–	–	–
			660	962	1457·5	43	65·1	6	3	9	13·6
Second Rate	Rodney	795	395	770	1949·3	14	35·4	3	1	4	10·1
Sixth Rate	Pearl	280	210	234	1114·2	14	66·6	2	–	2	9·5
Sloop	Icarus	125	125	103	824·	10	80·	3	3	6	48·
	Rinaldo, 1st Commission	180	155	189	1219·3	5	32·2	–	–	–	–
	Rinaldo, 2nd Commission	185	30	108	3600·	–	–	–	–	–	–
	Zebra, 1st Commission	190	160	212	1325·	6	37·5	1	–	1	6·2
	Zebra, 2nd Commission	195	30	73	2433·3	–	–	–	–	–	–
			500	685	1370·	21	42·	4	3	7	14·
Gun Vessel	Algerine	45	45	124	2755·5	6	133·3	1	–	1	22·2
	Avon	70	70	163	2328·5	10	142·8	2	–	2	28·5
	Cormorant	90	75	120	1600·	4	53·3	1	–	1	13·3
	Dwarf	75	75	144	1920·	4	53·3	–	–	–	–
	Elk	70	* 40 † 70	111	2775·	–	–	1	–	1	14·2
	Hornet	75	75	89	1186·6	3	40·	1	–	1	13·3
	Leven	50	50	63	1260·	2	40·	1	–	1	20·
	Midge	75	75	188	2506·6	3	40·	–	–	–	–
	Slaney	50	* 25 † 35	46	1840·	2	57·1	–	34	34	971·4
			* 530 † 570	1,048	1977·3	31	59·6	7	34	41	71·9

APPENDIX—CHINA STATION—TABLE, No. 1—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Steam Vessel	Salamis	90	90	176	1955·5	3	33·3	–	–	–	–
Gun Boats (8) with defective Returns		–	300	557	1856·6	27	90·	4	1	5	16·6
Surveying Vessel	Rifleman	80	10	30	3000·	1	100·	–	1	1	100·
	Sylvia, 1st Commission	105	90	153	1700·	5	55·5	1	–	1	11·1
	Sylvia, 2nd Commission	105	20	35	1750·	–	–	–	–	–	–
			120	218	1816·6	6	50·	1	1	2	16·6
Troop Ship	Adventure	155	155	193	1245·1	8	51·6	2	–	2	12·9
Receiving Ship	Princess Charlotte	210	210	375	1785·7	24	114·2	5	1	6	28·5
	TOTAL		*3,170 †3,210	5,218	1646·	194	60·4	34	44	78	24·2
											‡13·7
	Average Ratios for Fourteen Years				2059·1	–	63·4	–	–	–	37·2
											‡ Deducting for Men Lost in Slaney	‡36·7

* Cases.

† Invalidings and Deaths.

APPENDIX—CHINA STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Iron-clad	Ocean	3	1 Alcoholic poisoning.
			1 Found drowned.
			1 Fracture of skull; struck by a log of wood.
Second Rate	Rodney	1	Drowned; fell overboard.
Sloop	Icarus	3	2 Drowned; fell overboard.
			1 Injury to spine; fell from aloft.
Gun Vessel	Slaney	34	Drowned; shipwrecked.
Gun Boat	Havoc	1	Drowned.
Surveying Vessel	Rifleman	1	Drowned; fell overboard.
Receiving Ship	Princess Charlotte	1	Found drowned.
	TOTAL	44	

TABLE, No. III.

SHOWING the Comparative Sickness in the different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad - - - -	660	962	1457·5	43	65·1	6	3	9	13 6
Second Rate - - -	395	770	1949·3	14	35·4	3	1	4	10·1
Sixth Rate - - -	210	234	1114·2	14	66·6	2	—	2	9·5
Sloop - - - - -	500	685	1370·	21	42·	4	3	7	14·
Gun Vessel - - -	*530 †570	1,048	1977·3	34	59·6	7	34	41	71·9
Steam Vessel - - -	90	176	1955·5	3	33·3	—	—	—	—
Gun Boats - - -	300	557	1856·6	27	90·	4	1	5	16·6
Surveying Vessel - -	120	218	1816·6	6	50·	1	1	2	16·6
Troop Ship - - -	155	193	1245·1	8	51·6	2	—	2	12·9
Receiving Ship - - -	210	375	1785·7	24	114·2	5	1	6	28·5
TOTAL - - -	*3,170 †3,210	5,218	1646·	194	60·4	34	44	78	24·2
Average Ratios for Fourteen Years - - -			2059·1	- -	63·4	—	—	—	37·2
Deducting for Men lost in "Slaney" -		- -	- -	- -	- -	—	—	—	36·7

* For Cases.

† For Invalidings and Deaths.

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead, with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	3,410	6,587	1931·7	71	20·8	92	24	116	34·
1857 - -	7,080	17,595	2485·2	378	53·4	243	85	328	46·2
1858 - -	11,300	29,990	2653·9	915	80·9	586	120	706	62·5
1859 - -	6,600	15,756	2387·9	555	84·1	206	116	322	48·8
1860 - -	8,540	15,501	1815·1	615	72·	214	30	244	28·6
1861 - -	5,860	11,543	1967·9	361	61·6	128	25	153	26·1
1862 - -	3,570	8,107	2270·7	167	46·7	204	33	237	66·3
1863 - -	5,240	10,706	2258·6	336	64·	116	51	167	31·8
1864–5 -	5,080	8,798	1731·8	333	65·5	104	42	146	28·7
1865–6 -	4,195	7,159	1706·5	230	54·8	74	15	89	21·2
1866–7 -	3,515	5,816	1654·6	202	57·4	71	23	94	26·7
1867–8 -	4,100	7,479	1824·1	254	61·9	67	22	89	21·7
1868–9 -	4,200	5,952	1417·1	202	48·	42	14	56	13·3
1869–70 -	* 3,170 † 3,210	5,218	1646·	194	60·4	34	44	78	24·2
TOTAL - -	* 75,860 † 75,900	156,207	2059·1	4,813	63·4	2,181	644	2,825	37·2
								Deducting for Men lost in the Slaney - - - -	36·7

* For Cases.

† For Invalidings and Deaths.

APPENDIX—*continued.*

AUSTRALIAN STATION.

TABLE, No. I.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Sixth Rate - - -	Blanche - - - - - -	155	155	280	1806·4	5	32·2	-	-	-	-
	Challenger - - - - -	295	295	444	1505·	6	20·3	1	1	2	6·7
			450	724	1608·8	11	24·4	1	1	2	4·4
Sloop - - - -	Rosario - - - - - -	115	55·	104	1890·9	2	36·3	1	-	1	18·1
	Virago - - - - - -	165	165	241	1460·6	4	24·2	-	-	-	-
			220	345	1568·1	6	27·2	1	-	1	4·5
	TOTAL - - -		670	1,069	1595·5	17	25·3	2	1	3	4·4
	Average Ratios for Fourteen Years - - -				1410·1	-	26·7	-	-	-	12·6

APPENDIX—AUSTRALIAN STATION—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

Rate, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Sixth Rate -	Challenger -	1	Drowned; fell overboard.

TABLE, No. III.

SHOWING the Comparative Sickness in the different Classes of Ships.

Rate, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Sixth Rate -	450	724	1608·8	11	24·4	1	1	2	4·4
Sloop - -	220	345	1568·1	6	27·2	1	–	1	4·5
TOTAL - -	670	1,069	1595·5	17	25·3	2	1	3	4·4
Average Ratios for Fourteen Years - - - -			1410·1	–	26·7	–	–	–	12·6

APPENDIX—AUSTRALIAN STATION—*continued.*

TABLE, No. IV.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead, with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	540	771	1427·8	37	68·5	3	6	9	16·6
1857 - -	390	546	1400·	10	25·6	1	1	2	5·1
1858 - -	380	520	1368·5	9	23·7	1	2	3	7·9
1859 - -	585	800	1367·4	24	41·	9	2	11	18·8
1860 - -	940	1,186	1261·7	22	23·4	5	8	13	13·8
1861 - -	945	1,249	1322·8	27	28·4	8	5	13	13·7
1862 - -	945	1,122	1187·3	12	12·6	4	5	9	9·5
1863 - -	580	715	1232·7	17	29·3	5	11	16	27·5
1864–5 -	1,310	1,679	1281·6	35	26·7	8	7	15	11·4
1865–6 -	1,080	1,595	1476·8	29	26·8	7	8	15	13·8
1866–7 -	980	1,553	1584·6	15	15·3	12	5	17	17·3
1867–8 -	1,115	1,717	1539·9	19	17·	7	3	10	8·9
1868–9 -	920	1,525	1657·6	31	33·6	5	3	8	8·6
1869–70 -	670	1,069	1595·5	17	25·3	2	1	3	4·4
TOTAL -	11,380	16,047	1410·1	304	26·7	77	67	144	12·6

APPENDIX — *continued.*

IRREGULAR FORCE.

TABLE, No. 1.

SHOWING the Average Complements, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead; with the Ratios per 1,000 of Force.

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	Total.	Ratio per 1,000 of Force.
Iron-clad	Black Prince	685	170	195	1147·	3	17·6	–	–	–	–
	Monarch	540	270	359	1329·6	2	7·4	2	–	2	7·4
	Pallas	280	80	134	1675·	–	–	1	–	1	12·5
			520	688	1323·	5	9·6	3	–	3	5·7
Second Rate	Rodney	760	245	322	1314·2	8	32·6	3	–	3	12·2
Fourth Rate	Bristol	575	575	793	1379·1	15	26·	2	1	3	5·2
	Endymion	495	495	497	1004·	8	16·1	4	–	4	8·
	Galatea	570	570	767	1345·6	4	7·	5	2	7	12·2
	Liffey	550	550	807	1467·2	16	29·	4	4	8	14·5
	Liverpool	555	555	927	1670·2	7	12·6	1	2	3	5·4
	Narcissus	495	25	31	1240·	–	–	2	–	2	80·
	Phœbe	525	525	390	742·8	7	13·3	2	3	5	9·5
	Topaze	490	75	102	1360·	1	13·3	–	1	1	13·3
			3,370	4,314	1280·1	58	17·2	20	13	33	9·7
Sixth Rate	Barrosa	290	290	408	1406·8	6	20·6	1	1	2	6·8
	Clio	300	75	224	2986·6	–	–	–	1	1	10·
	Gladiator	305	100	255	2550·	–	–	–	–	–	–
	Juno	480	340	626	1841·1	4	11·7	5	2	7	20·5
	Malacca	190	35	57	1628·5	1	28·5	1	–	1	28·5
	Pearl	265	65	78	1200·	–	–	–	–	–	–
	Racoon	275	70	81	1157·1	2	28·5	3	–	3	42·8
	Scylla	260	260	642	2469·2	15	57·6	–	1	1	3·8
	Sirius	190	35	57	1628·5	1	28·5	–	–	–	–
			1,270	2,428	1911·8	29	22·8	10	5	15	11·8
Sloop	Argus	165	70	100	1428·5	3	42·8	–	–	–	–
	Daphne	145	20	71	3550·	1	50·	–	–	–	–
	Fawn	160	50	82	1640·	2	40·	–	–	–	–
	Greyhound	170	30	46	1533·3	–	–	2	–	2	66·6
	Perseus	165	45	55	1222·2	–	–	1	–	1	22·2
	Sphinx	375	45	16	355·5	1	22·2	–	–	–	–
	Spiteful	180	40	55	1375·	–	–	–	–	–	–
			300	425	1416·6	7	23·3	3	–	3	10·

APPENDIX—IRREGULAR FORCE—TABLE, No. I—*continued.*

Rate, &c.	NAMES OF SHIPS.	Average Complements.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
				Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	Total.	Ratio per 1,000 of Force.
Gun Vessel	Myrmidon	100	25	48	1920·	–	–	–	–	–	–
	Pert	80	10	16	1600·	–	–	–	–	–	–
	Rocket	70	10	13	1300·	–	–	–	–	–	–
	Serpent	105	16	17	1700·	–	–	–	–	–	–
	Teazer	70	25	54	2160.	2	80·	–	–	–	–
	Thistle	50	5	12·	2400·	1	200·	–	4	4	800·
			85	160	1882·3	3	35·2	–	4	4	47·
Steam Vessel	Nassau (1st Commission)	90	10	10	1000·	–	–	–	–	–	–
	Nassau (2nd Commission)	90	15	33	2200·	–	–	–	–	–	–
			25	43	1720·	–	–	–	–	–	–
Troop Ship	Crocodile	235	235	114	485·1	1	4·2	2	–	2	8·5
	Himalaya	210	210	330	1571·4	3	14·2	–	1	1	4·7
	Jumna	60	5	1	200·	–	–	–	–	–	–
	Orontes	215	215	270	1255·8	6	27·9	1	–	1	4·6
	Serapis	255	255	253	992·1	3	11·7	1	–	1	3·9
	Simoom	190	150	118	786·6	2	13·3	2	–	2	13·3
	Tamar	205	155	208	1341·9	6	38·7	–	–	–	–
	Urgent	165	25	7	280·	2	80·	–	–	–	–
			1,250	1,301	1040·8	23	18·4	6	1	7	5·6
Store Ship	Megæra	135	135	52	385·1	3	22·2	–	–	–	–
Ships Unclassed	Donegal	1,150	675	1,026	1520·	22	32·5	10	1	11	16·2
	Espoir	40	5	8	1600·	1	200·	1	–	1	200·
	Revenge (1st Commission)	715	180	101	561·1	3	16·6	–	–	–	–
	Revenge (2nd Commission)	660	235	395	1680·8	7	29·7	2	–	2	8·5
	Terrible	325	205	250	1219·5	3	14·6	2	–	2	9·7
			1,360	1,780	1369·2	36	27·6	15	1	16	12·3
	TOTALS		8,500	11,513	1354·4	172	20·2	60	24	84	9·8
	Average Ratios for Fourteen Years				1527·3	–	24·5	–	–	–	10·

APPENDIX—IRREGULAR FORCE—*continued.*

TABLE, No. II.

SHOWING the Number and Nature of Fatal Casualties in each Ship.

RATE, &c.	NAMES OF SHIPS.	Number of Deaths.	Nature of Injuries, &c.
Fourth Rate -	Bristol - - -	1	Fractures; fell from aloft.
	Galatea - - -	2	1 Drowned; fell overboard.
			1 Found drowned.
	Liffey - - -	4	3 Fractured skull; fell from aloft.
			1 Drowned; fell overboard.
	Liverpool - -	2	Drowned; fell overboard.
	Phœbe - - -	3	1 Internal injuries; fell from aloft.
			1 Drowned; knocked overboard.
			1 Drowned; fell overboard.
	Topaze - - -	1	Drowned; fell overboard.
Sixth Rate - -	Barrosa - - -	1	Drowned; fell overboard.
	Gladiator - -	1	Drowned; fell overboard.
	Juno - - -	2	1 Drowned; fell overboard.
			1 Fractured skull; fell from aloft.
	Scylla - - -	1	Drowned; fell overboard.
Gun Vessel -	Thistle - - -	4	Killed by the explosion of the boiler.
Troop Ship -	Himalaya - -	1	Fractured skull; fell from aloft.
Ships unclassed -	Donegal - - -	1	Fractured skull; fell from aloft.
		24	

TABLE, No. III.

SHOWING the Comparative Sickness in the different Classes of Ships.

RATE, &c.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Iron-clad - - - -	520	688	1323··	5	9·6	3	—	3	5·7
Second Rate - - -	245	322	1314·2	8	32·6	3	—	3	12·2
Fourth Rate - - -	3,370	4,314	1280·1	58	17·2	20	13	33	9·7
Sixth Rate - - -	1,270	2,428	1911·8	29	22·8	10	5	15	11·8
Sloop - - - -	300	425	1416·6	7	23·3	3	—	3	10·
Gun Vessel - - -	85	160	1882·3	3	35·2	—	4	4	47·
Steam Vessel - - -	25	43	1720·	—	—	—	—	—	—
Troop Ship - - -	1,250	1,301	1040·8	23	18·4	6	1	7	5·6
Store Ship - - -	135	52	385·1	3	22·2	—	—	—	—
Ships unclassed - -	1,300	1,780	1369·2	36	27·6	15	1	16	12·3
TOTALS - - -	8,500	11,513	1354·4	172	20·2	60	24	84	9·8
Average Ratios for Fourteen Years - - -			1527·3	- -	24·5	—	—	—	10·

TABLE IV.

SHOWING the Number of Cases of Disease and Injury; the Number Invalided and Dead; with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Complements corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	10,000	13,830	1383·	136	13·6	78	27	105	10·5
1857 - -	7,490	10,879	1454·4	227	30·3	72	29	101	13·5
1858 - -	4,260	6,077	1426·5	68	16·	32	24	56	13·2
1859 - -	6,060	10,193	1682·	147	24·3	46	18	64	10·5
1860 - -	6,430	9,940	1545·9	168	26·2	41	21	62	9·6
1861 - -	3,730	6,396	1714·7	99	26·5	21	18	39	10·4
1862 - -	5,960	10,645	1786·	206	34·5	38	19	57	9·5
1863 - -	3,810	6,925	1817·5	104	27·2	22	8	30	7·8
1864–5 -	2,690	4,556	1693·6	61	22·6	10	5	15	5·5
1865–6 -	3,760	6,501	1728·9	111	29·5	17	6	23	6·1
1866–7 -	5,060	8,127	1606·1	115	22·7	42	21	63	12·4
1867–8 -	5,465	7,463	1365·5	142	25·9	38	12	50	9·1
1868–9 -	6,270	8,355	1332·5	198	31·5	31	19	50	7·9
1869–70 -	8,500	11,513	1354·4	172	20·2	60	24	84	9·8
TOTALS - -	79,485	121,400	1527·3	1,954	24 5	548	251	799	10·

TOTAL FORCE.

TABLE, No. I.

SHOWING the Average Force corrected for Time, the Number of Cases of Disease and Injury, the Number Invalided, and the Number Dead, with the Ratios per 1,000 of Force on the different Stations.

STATIONS.	Average Force Corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
Home - - - - -	21,080	18,894	896·2	557	26·4	120	28	148	7·
Mediterranean - - -	4,120	5,671	1376·4	153	37·1	21	8	29	7·
North America and West Indies - - - - -	{*3,380 †3,500}	5,271	1559·4	120	34·2	70	11	81	23·1
South East Coast of America	{* 610 † 640}	656	1075·4	21	32·8	10	2	12	18·7
Pacific - - - - -	{*1,960 †2,050}	2,825	1441·3	50	24·3	13	9	22	10·7
West Coast of Africa and Cape of Good Hope -	{*1,730 †1,900}	2,983	1724·2	118	62·1	12	3	15	7·8
East Indies - - -	{*2,100 †2,170}	3,821	1819 5	139	64·	20	4	24	11·
China - - - - -	{*3,170 †3,210}	5,218	1646·	194	60·4	34	44	78	24·2
Australia - - - -	670	1,069	1595·5	17	25·3	2	1	3	4·4
Irregular - - - -	8,500	11,513	1354·4	172	20·2	60	24	84	9·8
TOTAL - - -	{*47,320 †47,840}	57,921	1224·	1,541	32·2	362	134	496	10·3
Average Ratios for Fourteen Years -			1409·1	-	34·2	-	-	-	14·

* For Cases. † For Invalidings and Deaths.

APPENDIX—TOTAL FORCE—*continued.*

TABLE, No. II.

SHOWING the Ratio per 1,000 of Force of the Number of Cases of Disease and Injury,

RATES, &c.	Home.			Mediterranean.			North America and West Indies.			South East Coast of America.			Pacific.		
	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.
Iron-clad	1162·4	26·9	4·5	1263·2	37·3	6·	1203·1	34·4	22·1	-	-	-	1674·6	19·4	11·9
Second Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fourth Rate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sixth Rate	1755·5	22·2	11·1	-	-	-	1377·4	26·7	5·6	523·8	19·	9·5	1019·2	15·7	7·
Sloop	2075·	-	50·	1677·4	51·6	16·1	1530·9	27·2	32·7	1157·1	85·7	-	1592·3	27·6	14·8
Gun Vessel	975·	-	-	2658·3	50·	-	1770·5	44·1	29·4	1450·	40·9	13·6	1844·4	31·1	13·3
Steam Vessel	1025·2	22·9	4·5	1895·8	33·3	12·5	-	-	-	-	-	-	-	-	-
Gun Boat	1075·	-	-	1535·7	14·2	-	-	-	-	-	-	-	-	-	-
Gun Boats, with defective Returns	-	-	-	-	-	-	-	41·6	25·	-	-	-	-	-	-
Stationary Ship	777·9	30·9	8·2	-	-	-	-	-	-	-	-	-	-	-	-
Drill Ship	962·5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coast Guard Ship	1110·7	25·2	9·4	-	-	-	-	-	-	-	-	-	-	-	-
Training Ship	662·9	22·7	5·8	-	-	-	-	-	-	-	-	-	-	-	-
Yacht	327·7	-	5·5	-	-	-	-	-	-	-	-	-	-	-	-
Troop Ship	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Store Ship	1120·	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Brig	859·5	2·3	-	-	-	-	-	-	-	-	-	-	833·3	125·	-
Receiving Ship	-	-	-	1133·3	20·	13·3	3423·8	57·1	71·4	1500·	16·6	58·3	-	-	-
Surveying Vessel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Floating Battery and Dock-yard	-	-	-	-	-	-	1682·8	34·2	11·4	-	-	-	-	-	-
Marine Detachment	-	-	-	-	-	-	-	-	-	550·	-	-	813·3	40·	-
Unclassed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	896·2	26·4	7·	1376·4	37·	7·	1559·4	34·2	23·1	1075·4	32·8	18·7	1441·3	24·3	10·7

APPENDIX—TOTAL FORCE—*continued.*

TABLE, No. II.

of the Number Invalided, and the Number Dead, in the different Classes of Ships.

West Coast of Africa and Cape of Good Hope.			East Indies.			China.			Australia.			Irregular Force.			Totals for each Class.		
Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.	Ratio of Cases.	Ratio of Invaliding.	Ratio of Deaths.
-	-	-	-	-	-	1457·5	65·1	13·6	-	-	-	1323·	9·6	5·7	1266·6	32·1	8·2
-	-	-	-	-	-	1949·3	35·4	10·1	-	-	-	1314·2	32·6	12·2	1706·2	34·3	10·9
-	-	-	1412·6	66·	9·1	-	-	-	-	-	-	1280·1	17·2	9·7	1298·5	24·	9·7
1542·	24·3	5·4	1885·2	42·6	10·6	1114·2	66·6	9·5	1608·8	24·4	4·4	1911·8	22·8	11·8	1520·9	26·1	8·7
1622·2	11·1	11·1	1802·3	40·4	11·2	1370·	42·	14·	1568·1	27·2	4·5	1416·6	23·3	10·	1558·8	34·3	16·3
2192·3	119·2	11·5	2702·8	27·2	4·5	1977·3	59·6	71·9	-	-	-	1882·3	35·2	47·	2002·2	60·6	29·
3225·	275·	-	-	-	-	1955·5	33·3	-	-	-	-	1720·	-	-	1504·8	38·5	6·
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1433·3	11·1	-
-	-	-	-	-	-	1856·6	90·	16·6	-	-	-	-	-	-	1326·1	76·1	19·
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	777·9	30·9	8·2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	962·5	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1110·7	25·2	9·4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	662·9	22·7	5·8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	327·7	-	5·5
-	-	-	1902·2	100·7	10·6	1245·1	51·6	12·9	-	-	-	1040·8	18·4	5·6	1330·	47·	7·7
1365·7	57·1	8·5	-	-	-	-	-	-	-	-	-	385·1	22·2	-	1084·5	44·8	4·8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859·5	2·3	-
650·	37·5	6·2	-	-	-	1785·7	114·2	28·5	-	-	-	-	-	-	2035·7	55·2	36·4
-	-	-	-	-	-	1816·6	50·	16·6	-	-	-	-	-	-	1816·6	50·	16·6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1682·8	34·2	11·4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	757·8	31·5	-
-	-	-	-	-	-	-	-	-	-	-	-	1369·2	27·6	12·3	1369·2	27·6	12·3
1724·2	62·1	7·8	1819·5	64·	11·	1946·	60·4	24·2	1595·2	25·3	4·4	1354·4	20·2	9·8	1224·	32·2	10·3

APPENDIX—TOTAL FORCE—*continued.*

TABLE, No. III.

SHOWING the Number of Cases of Disease and Injury, the Number Invalided and Dead; with the Ratios per 1,000 of Force, for Fourteen Years.

YEAR.	Average Force corrected for Time.	Cases of Disease and Injury.		Invalided.		Dead.			
		Number.	Ratio per 1,000 of Force.	Number.	Ratio per 1,000 of Force.	From Disease.	From Injury.	TOTAL.	Ratio per 1,000 of Force.
1856 - -	51,730	73,195	1414·9	* 998	* 19·3	629	172	801	15·5
1857 - -	42,470	66,546	1566·6	1,460	34·4	623	196	819	19·4
1858 - -	43,120	75,924	1763·9	1,763	40·9	873	242	115	25·5
1859 - -	52,825	81,325	1540·2	1,994	37·7	624	262	886	16·7
1860 - -	64,025	90,329	1410·8	2,844	44·4	712	226	938	14·7
1861 - -	62,485	91,276	1460·7	2,391	38·2	716	224	940	15·
1862 - -	58,870	88,661	1506·	1,944	33·	684	218	902	15·3
1863 - -	54,090	78,664	1454·3	1,903	35·1	414	205	619	11·4
1864–5 -	51,225	67,558	1318·8	1,792	34·9	444	270	714	13·9
1865–6 -	50,495	67,593	1338·6	1,590	31·4	404	131	535	10·5
1866–7 -	†49,960 ‡50,275	63,188	1264·8	1,447	28·7	400	125	525	10·4
1867–8 -	†50,160 ‡50,340	64,997	1295·7	1,748	34·7	420	138	558	11·
1868–9 -	†50,255 ‡50,405	60,122	1196·3	1,563	31·	295	126	421	8·3
1869–70 -	†47,320 ‡47,840	57,921	1224·	1,541	32·2	362	134	496	10·3
TOTALS - -	† 729,030 ‡ 730,195	1,027,299	1409·1	24,978	34·2	7,600	2,669	10,269	14·

* Returns incomplete. † For Cases. ‡ For Invalidings and Deaths.

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